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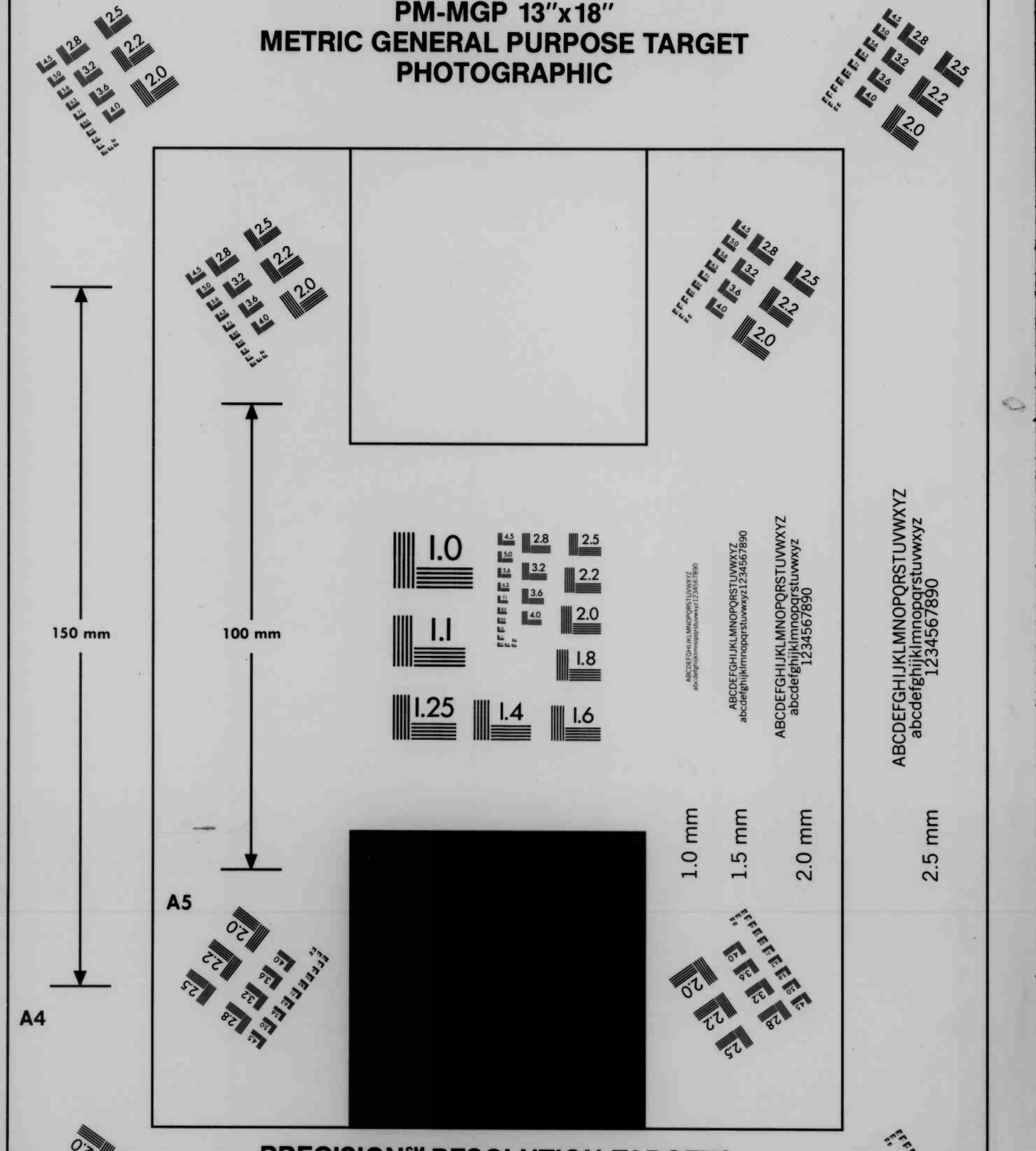

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STATE OF NEW YORK

REPORT OF COMMISSION

ON

REVISION OF THE PUBLIC SERVICE COMMISSIONS LAW

INCLUDING

Separate Reports of Commissioners and Counsel

ALBANY
J. B. LYON COMPANY, PRINTERS
1930

Legislative Document (1930) No. 75

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MEMBERS OF THE COMMISSION

JOHN KNIGHT ..... *Chairman*
HORACE M. STONE ..... *Vice-chairman*
DAVID C. ADIE ..... *Secretary*

JOSEPH A. McGINNIES — RUSSELL G. DUNMORE
WARREN T. THAYER — FRANK P. WALSH
WILLIAM J. HICKEY — JAMES C. BONBRIGHT

WILLIAM J. DONOVAN, *Counsel*

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To the Legislature:

Your Commission on the revision of Public Service Commissions Law, which was designated February 10, 1929, respectively submits its complete report. For purposes of convenience, it is divided into three parts as follows:

I. Summary of Recommendations.

II. Authority, Scope and Purpose.

III. Findings and Conclusions.

PART I

SUMMARY OF RECOMMENDATIONS

We recommend:

(1) That a valuation be made of all public utilities in the state except steam railways and street railways.

(2) That the Public Service Commission be authorized to enter into contracts with utility corporations for stabilization of valuation and regulation through accounting control for a period not exceeding ten (10) years.

(3) That the authority of the Commission be extended so as to enable it to secure complete information regarding the identity of stockholders of utility corporations and transactions between utility corporations, holding companies, affiliated service agencies and other affiliated interests.

(4) That the authority of the Commission with respect to accounting control, security authorizations, reorganizations, mergers, transfers of franchises or property and acquisitions of stock of utility corporations be strengthened and extended.

(5) That a reasonable procedure be established for the recovery of reparations in cases where rates have been declared unreasonable or unjust.

(6) That sub-metering companies be prohibited from charging more than the filed rates of the companies from which they purchase current and that they be subjected to the limited jurisdiction of the Public Service Commission.

(7) That a Commission be established to study and report upon interstate problems affecting regulation, including the feasibility of action with neighboring states through compacts.

(8) That the jurisdiction of the Commission be extended over motor bus companies, private water companies and telephone companies with property values of less than $10,000.

(9) That no change be made in the distribution of functions relative to grade crossing elimination work between the Public Service Commission and the Department of Public Works, but that the acts relating to grade crossing elimination be amended to correct defects that have developed through experience.

(10) That a Division of Rural Electrification be established in the Public Service Commission to study and promote the development of rural electrification on an area plan.

(11) That a Bureau of Research and Valuation be established in the Public Service Commission with its principal task that of intensive studies of cost accounting, cost of service and rate structures.

(12) That public utility corporations be required to give notice of proposed changes of rates by public advertisement and by notice to consumers with their bills.

(13) That the office of Peoples Counsel be created in the Department of Law, to be filled through appointment by the Attorney-General with the duty of representing the people and cooperating with the representatives of municipalities and consumers in proceedings before the Public Service Commission and in the courts.

(14) That appropriate legislation be passed to enable the State to take advantage of the provisions of section 266 of the Federal Judicial Code providing for the observance of the principles of comity by the Federal courts.

(15) That the Legislature urge upon Congress the revision of the Federal Judicial Code so as to make it possible for State courts to make primary determinations in rate cases prior to appeal to the Federal courts.

(16) That the staff of the Public Service Commission be increased and that additional appropriations be made to enable the Public Service Commission to carry out these recommendations.

(17) That the testimony presented to us regarding the coal freight charged by the electric companies in New York; the alleged deterioration in the quality of gas furnished in New York city; the expenditures of the gas and electric companies in New York city in connection with the adjustment of franchise taxes; and the service of the International Railway Company of Buffalo be called to the attention of the appropriate State authorities for such action as may be required.

There are many other amendments of secondary importance which we have approved and which will be submitted in the form of bills to the Legislature.

PART II

AUTHORITY, SCOPE AND PURPOSE

Regulation by Public Service Commission was adopted in this State in 1907. This was a radical departure from existing methods of control of public utilities. It meant a delegation by the Legislature to the Commission of certain of its powers and privileges. It meant also a transfer to the Commission of certain powers of the Court. This system of regulation was adopted by reason of the evils that existed under a system of control by the Legislature and municipalities which was haphazard and erratic. Abuses had grown up which could not effectively be met by direct legislative control. Attempt to control by municipal subdivisions of the State were equally ineffective. State commissions with limited control had also proven a failure.

As a result of the institution of a Commission with state-wide control a great advance had been made over the period before such regulation. During the existence of this system we have seen a tremendous growth in public utilities generally. Their character and scope surpass anything conceived of at the time the Public Service Commission was established. This method of control has demonstrated its usefulness during the past twenty-three years. Now, with the great social and economic changes that have occurred during that period, new problems are presented which call for an examination of the system to determine whether or not the control and regulation now exercised is sufficient, and if lacking, how it may be strengthened.

This particular inquiry was brought about by the above considerations as well as by the criticisms concerning the adequacy of the present statute and also its administration by the Commission. In February, 1929, you enacted a measure providing for investigation of the Public Service Commissions Law, with special reference to the desirability of modifying it and supplementing it where necessary.

Pursuant to Chapter 673 of the Laws of New York, 1929, this Commission, consisting of the temporary President of the Senate, John Knight, Senators Warren T. Thayer and William J. Hickey, three members of the Assembly, Speaker Joseph A. McGinnies, Horace M. Stone and Russell G. Dunmore and three appointees of the Governor, Frank G. Walsh, James C. Bonbright and David C. Adie.

Under the terms of the act designating this Commission, the following purposes were enumerated:

> "to make a thorough survey, examination and study of the public service commission laws of this and other states, for the purpose of ascertaining whether the public service commission law of this state accomplishes the objects for which the sys-

tem of state regulation was established, and for determining what amendment or revision of the public service commission law is essential to guarantee to the public safe and adequate service at just and reasonable rates, to the stockholders of public service corporations, a fair return upon their investments, and to bondholders and other creditors, protection against impairment of the security of their loans; to recommend to the legislature any remedial or other legislation with relation thereto which it may deem proper as a result of its survey, examination and study; and to formulate and prepare or cause to be prepared a draft of any proposed legislation which may be recommended by it with reference to this subject."

On July 1, 1929, this Commission met in the Chambers of the temporary president of the Senate and organized by the selection of the Hon. John Knight, of Arcade, New York, as Chairman; Hon. Horace M. Stone, of Syracuse, as Vice-Chairman; and Hon. David C. Adie of Buffalo, as Secretary of said Commission.

Thereafter, pursuant to the authorization of the Commission the Chairman appointed William J. Donovan counsel to the Commission.

On July 15, 1929 the Commission met at the Association of the Bar of the City of New York. At that time counsel proposed a plan of procedure, which received the unanimous approval of the Commission. This plan was described by counsel as follows:

"In accordance with the request of the Chairman, Senator Knight, I have prepared an outline of a proposal for the conduct of the present inquiry.

"This plan is based on certain assumptions. It assumes that the committee starts with no preconceived theory to be established and no particular policy to be demonstrated. It takes for granted that the purpose of this investigation is to ascertain all available facts. It assumes that, while there may be disagreement among the members as to the interpretation of these facts and the conclusions to be drawn from them, there is no disagreement among the committee as to the necessity of having presented for consideration every element and every opinion which would throw light upon the subject.

"Of necessity this outline is general and not in detail but it does indicate a thorough examination of all factors bearing upon the problem. It is under four heads."

A. *The working of the present law.*

I. Exposition by commissioners and counsel.

B. *Views of economic and technical experts as to the proposed extension of the present law.*

I. Surveys as to the laws of other States.

II. Testimony of those desiring to be heard and proposed change of policy in dealing with the public utilities.

C. *Testimony of practical operators of various utilities as to their dealing with the public and their views as to regulatory legislation.*

The subdivision of these headings would be as follows:

A. *The working of the present law.*

I. Legislative history of the Public Service Commission Act.

II. Organization of present Commission.

III. Function of present Commission.

(a) Investigation.

(b) Maintenance of standards of service.

(c) Control of accounting and of financing.

(d) Control of rates.

IV. State appropriation for work of Commission.

V. Adequacy of the law and suggested remedies.

B. *Views of economic and technical experts as to the proposed extension of the present law.*

I. Survey of operation of Public Service Commissions in other States.

II. Laws enacted in foreign countries.

III. Testimony of technical expert concerning:

(a) Problems presented by holding companies.

(b) Proposed methods of control.

(c) Policy covering interstate transactions; cooperation with other States by contract or other means.

IV. Proposed legislation for extension of authority.

C. *Testimony of practical operators of various utilities as to their dealing with the public and their views as to regulatory legislation.*

I. The operations of various utilities; policy of respective companies; problems in relation to the public.

II. Economic reasons for consolidation.

III. Existing legislation in relation to present condition of utilities.

IV. Effect of present policy of Commission upon operation of various companies.

V. Recommendations for legislation.

Thereafter with the approval of the Commission, Counsel engaged the services of Dr. William E. Mosher, Director of the School of Citizenship and Public Affairs at Syracuse University, together with a group of the following qualified specialists:

Maurice R. Scharff, Consulting Engineer.
Finla G. Crawford, Public Administration.
Charles S. Hyneman, Administrative Law.
Orin C. Hormell, Public Administration.
John Bauer, Consulting Economist.
E. K. Redfern, Accountant.
Helen B. Breese, Research Assistant.
Paul V. Betters, Research Assistant.

Special investigations were made in the following subjects: accounting and reporting, rural electrification, and methods of controlling utilities in foreign countries. In addition a map showing the areas under the control of utility companies in New York, Pennsylvania and New Jersey was prepared under the auspices of the Commission and is included in the Exhibits.

In accordance with the above plan of procedure, public hearings were commenced on October 9, 1929, and continued up to and including the 15th day of January 1930. A total of forty-three public hearings were held. Of these hearings, twenty-eight were held at the Association of the Bar of the city of New York; twelve were held at the City Hall, New York; two were held at the City Hall, Buffalo; and one was held at the County Courthouse, Syracuse. At these hearings the Commission examined a total of ninety-five witnesses, including all the members of the New York Public Service Commission, its staff, members of the Massachusetts Department of Public Utilities, members of the Public Service Commission of Indiana, representatives of municipalities and civic organizations, representatives of the public, technical experts and advisors, and representatives of the utilities. The testimony of all witneses examined, covering a total of 5,816 pages and including 205 exhibits, and the record of the proceedings at all hearings are herewith submitted.

In preparation for these hearings, invitations were extended to all known outstanding representatives of the various groups from which it was felt that helpful information and suggestion might be secured as provided in the plan of procedure previously outlined. In this manner it may be stated that opportunity was offered for the appearance of every citizen interested in the subject and for the presentation of every possible viewpoint that could be helpful in the solution of the problem assigned to the Commission.

The examination of witnesses appearing at the hearings was conducted by counsel for the Commission on the basis of questions carefully prepared in advance with the cooperation of members of the research staff and designed to present the viewpoint of each witness in a complete and logical manner. At the same time the hearings were conducted in such a manner as to afford the fullest opportunity to all witnesses to express their personal views with the utmost freedom.

In arriving at our conclusions we have carefully studied the testimony taken at these hearings and the exhibits included in the record. In addition, we have had the advantage of consultation throughout our consideration with our counsel and the members of our research staff, including specialists who have had occasion to study intensively the various phases of this problem not only throughout the progress of current investigation but also in their professional experience.

In accordance with our formal instructions, counsel prepared with the aid of a research staff, an analysis of the testimony and

of the information on the suggestion of special subjects, prepared by members of the research staff, as well as a statement of the principles upon which this analysis was based. This report of counsel, submitted herewith, dated Monday, February 24, 1930, constituted the basis of discussion by the Commission in reaching the conclusions hereinafter set forth.

There was presented to the Commission also, two reports—one prepared by Senator Warren T. Thayer and one by Commissioners James C. Bonbright and Frank P. Walsh and David Adie—copies of these reports and of the complete record of these proceedings are also submitted herewith.

We regret that certain of our colleagues find themselves unable to concur with us in all of our recommendations. We regret this particularly because in an unusual degree this Commission has worked in harmony during all these months of hearing. We believe that the members of the Commission, during the course of these hearings, have come to respect the opinions of one another and have recognized the desire on the part of all to arrive at a determination in the public interest.

An examination of the record pertaining to a discussion of final recommendations will disclose how closely there was an agreement on nearly every conclusion. In fact there was unanimous agreement on every recommendation excepting four. These were—Valuation, People's Counsel, Salary Policies and Grade Crossing Elimination. In these cases, although there was a difference of principle, there was no substantial difference in practical result sought to be obtained. It may be of interest to the Legislature if we note such differences:

1. *Valuation:* Both the majority and minority plan contemplates a complete physical appraisal of all utilities in the State. Both contemplate a fair return on the initial valuation in accordance with the law of the land, with returns on conditions based on actual cost or investment. The plan of the minority would be mandatory and perpetual. The plan of the majority would be voluntary agreement between the utility and the State Commission under authority of the Legislature and for a limited period.

2. *People's Counsel:* In this the only difference is in the method of appointment. The minority urge an appointment by the Governor; the majority by the Attorney-General with the duties specified in the statute.

3. *Salary Policy:* The minority propose a minimum raising of salaries for certain positions in the Public Service Commission. The majority call for a comprehensive survey of the present salary schedules looking toward a classification and standardization and having in mind that the question involved more than a single department, and is related to the salary policy of all the departments of the State.

4. *Grade Crossing Elimination:* The minority recommended the transfer of the present functions of the Public Service Commission to the Department of Public Works. To this the majority objected because the asserted advantage was not sustained by the facts.

In regard to the question of municipal competition, the minority members urge granting the municipalities the right to build their own systems in competition with private systems without the necessity of a certificate of authority from the Public Service Commission; the right to serve the surrounding territory without appeal to the Legislature; the right to replace private plants at the end of the franchise period without being obliged to purchase the existing facilities; the right to form power districts for the purpose of supplying electricity at cost to the municipalities within the district. This Commission made no detailed study, either of the general problem or of these particular suggestions. In the absence of a complete inquiry into this subject, we do not believe that any extension of municipal operation in competition with private plants should be permitted, at least until further attempt has been made to secure effective regulation.

The New York State Public Service Commission is not alone one of the two oldest but it is widely recognized as one of the leaders among the commissions of the United States. From the point of view of the annual appropriations, the size of staff and finally that of number and extent of utility companies under its supervision, there is no commission in the country which may be compared with the Commission of this State. Again, when one considers the record of achievement as summarized in the exhibits presented to the Investigating Commission, it is evident that the Public Service Commission and its staff have accomplished a really tremendous amount of work. The average number of formal proceedings totals 900 per year while the average number of informal complaints is in excess of 11,000 annually.

Some of the Commissioners have been charged with being "utility-minded" and with having been remiss in the performance of their duties. While we recognize the shortcomings in the administration of its functions as these appear in certain portions of the hearings, we believe that the charge cannot be sustained that utility regulation through the Public Service Commission is a failure. Many of the shortcomings noted are due to the inadequacy of staff and the added duties to which reference is later made.

We think it fair to say that the Commission, by over-estimating the judicial side, has neglected what was originally conceived to be its primary function—to advance the interests of the public in relation to the service of utility companies. This may be due to the overwhelming burden of routine duties, on the one hand, and the fact that judicial functions and a more or less aggressive policy of defending the interest of the public, are not easily harmonized. In recognition of this latter circumstance, we are recommending the appointment of a people's counsel who will be charged with the specific duty of representing the interest of the public in utility matters.

After carefully considering the results of our investigation, we cannot but come to the conclusion that no charges involving the integrity of members of the Commission or its staff can be sustained.

It is, therefore, our belief that the record does not justify the deduction that regulation through the Public Service Commission has failed. We are ready to admit that the Commission, like other human institutions, may be improved and are accordingly making a series of recommendations looking in this direction.

These recommendations deal not alone with an extension of the authority of the Commission with respect to a new method of valuations, proper control over holding and affiliated companies, but also call for a material increase in the regular staff and the installation of a Valuation and Research Division which is to be engaged in setting up valuations, in devising more adequate methods of accounting control, of rate regulation and other features of supervision that the Commission has been unable to handle effectively on account of its absorption in the duties of routine administration.

Finally, we also make a recommendation as to possible methods of having appeal from decisions of the Public Service Commission made to the State rather than the Federal Courts.

It is our conviction that by strengthening the Public Service Commission along these lines both with regard to legislative authority and more adequate appropriations, we may look forward to really effective supervision and control of the essential services performed by the utility throughout the State.

Throughout these proceedings we have adhered to the principle of conducting an inquiry that would be impartial and would endeavor to ascertain all the significant facts bearing upon the regulation of utilities.

It is in accordance with the principle that we have approached the task of suggesting remedies to assume the protection of the public interest. If these recommendations are adopted, in our opinion, it will mark the opening of a new epoch of utility regulation in New York State and will enable the Public Service Commission of this State to be in the very forefront of regulatory bodies throughout the country.

PART III

FINDINGS AND CONCLUSIONS

Valuation for Ratemaking Purposes

We recommend:

1. *That all utility properties in the State, except steam railways and street railways, be valued by the Public Service Commission according to the factors prescribed by the law of the land.*

2. *That the Public Service Commission be authorized to enter into contractual agreements with the utility companies whereby the initial valuations shall be used as the rate base for existing properties for a period up to ten years.*

3. *That future investments during the period of the contract shall be added to the initial valuation, according to the amount actually expended and approved by the Public Service Commission and that rate regulation during such period shall be exercised through accounting control.*

4. *That at the end of the period the valuation shall be revised and new agreements entered into.*

5. *That in the case of companies unwilling to enter into such agreements, the Commission shall use the initial valuations and keep them up to date according to accepted methods.*

There is no problem confronting the utility managers and the public today, in any way comparable to the problem of valuation. Upon its proper solution, as upon nothing else, depends the future of public utility supervision and control. Nor is there any problem which is more complex and about which opinions, official and unofficial are so much at variance.

The Supreme Court, the chief source of the definitions of what constitutes value, is often divided within itself. Its decisions, taken all together, lay the ground for methods of determining values that permit of a great variety of interpretations and emphases. In these decisions intangibles are recognized, concerning which the most expert technicians fail to agree. The way is open for inflation of claims by the companies, which if court decisions be taken as a criterion sometimes run into hundreds of millions of dollars. (See the valuations submitted by the New York Telephone Company and the decision of the Third District Court.)

It will not be disputed that, although the task of fixing rates is one of their current and most important problems, public service commissions the country over are in considerable doubt as to the policy that should be adopted in connection with the actual determination of fair value, which is basic for the fixation of rates.

Analysis of the findings of the New York State Commission in important rate cases fails to disclose the application of a consistent policy. It was either tacitly or explicitly admitted that in the absence of a policy, each case had necessarily to be handled for itself. Furthermore, where valuations had not been determined in a rate proceeding, that is, in the great majority of cases, it was made clear in the testimony that the Commission had only book costs at its disposal, which admittedly were inadequate for the determination of a rate base. It was clear from the evidence that the Commission is in a serious quandry as to the method of fixing base values. Effective regulation requires a definite rate base and one that will not be subject to more or less continuous variation. The various proposals for establishing such a rate base bear witness to the widespread recognition of this need. Your Commission accordingly gave consideration to several such proposals and reached a decision concerning what seems to it to most nearly meet the needs of the situation in New York and at the same time to make an important step in advance.

Before discussing this proposal in detail, it is fitting that consideration be given to a plan of valuation which was set forth by Dr. J. C. Bonbright, a member of this Commission, and submitted to it as a part of the minority report which has been appended to the report of this Commission. In its main features this coincides with the Bauer plan to which considerable attention was given in the course of the investigation.

A—The Bonbright Plan

In order to bring certainty in what is generally admitted to be an uncertain and undesirable situation, Dr. Bonbright proposes that the base value for rate making purposes shall be determined by a legislative mandate for all utilities in the State, excepting steam railways and street railways, according to the following provisions:

He deals first with existing properties; that is, properties existing at the time of the proposed valuation, and then with the handling of future investments.

1. *Valuations of existing properties:* It is provided that an initial valuation shall be made of all properties as of the date of the adoption of the act, taking into account every element properly considered under the law of the land, including actual cost, reproduction cost, general expenditures, depreciation, going value and any other relevant factor. Such initial valuations when once determined shall remain unchanged in the future without regard to price fluctuations, costs of construction or other conditions.

2. *Subsequent investments:* The plan provides that the amounts of the actual and reasonable cost of new properties shall be entered into the accounts of the company and added to the initial valuation, thus enabling the Commission to have always available, through accounting control, the total rate base. Provision is made for ordinary maintenance, depreciation and retirement of any unit of property.

COMMENTS

The Commission recognizes the advantage, both from the point of view of simplicity and definiteness, that would result from the adoption of the valuation plan described above. It has given due consideration to its merits as well as its deficiencies.

The following comments seem to be in order, first with regard to the economic and then to the legal complications involved.

The proposal presented by Dr. Bonbright is to be explained and justified as a natural result of the indefinite and cumbersome valuation policy that is based on Supreme Court decisions. Instead of a progressive clarification of the principles which in the judgment of the Supreme Court should guide those responsible for fixing valuations, the difficulties of applying such principles are apparently increasing rather than lessening. The existing situation may be due to the fact that utility economics have not been sufficiently worked out and the differences between public utility economics and private property economics is not clearly defined. The proposal presented by Dr. Bonbright aims to bring order into a more or less chaotic situation and is to be commended for that reason. It assumes and properly assumes that the Supreme Court's position is subject to change as public thought and public policy change. It is developed on the assumption that the Supreme Court will recognize the advantages of a definite scheme of valuation, that this scheme is in line with the interests of the whole public and that it will give its sanction to such a scheme if it comes before it in the form of a definite legislative mandate.

However sound from the economic point of view the fixation of values of existing properties from this time forth may be and, therefore, however right and just the provisions of this bill may be, the acceptance of its provisions either by the Legislature or the Supreme Court must depend upon a preliminary period of education. It is believed that recommendations of this sort from the Legislative Commission must be made not with reference to what is perhaps ideal and desirable but rather with reference to what is desirable and at the same time feasible and expedient. In our judgment there can be no such drastic break with the past as is proposed in this bill without a series of intermediate steps, which grow out of a new public policy shaped up under more or less persistent educational efforts.

The second objection to the bill, one that is really involved in the preceding statement, is the unwarranted assumption that the confiscatory clause of the 14th Amendment will no longer apply to public utility property. Those supporting the measure must naturally anticipate major fluctuations over a period of years. Any student of economic history would predict this with considerable confidence. If these fluctuations are downward, the investors will be penalized, whereas if they rise materially the consuming public will suffer. Either situation would probably give rise and properly give rise to an appeal to the courts.

It cannot be left out of account that those who have invested their money in utility securities have done so in good faith, believing that fluctuations in price levels would be reflected in returns on investments. Such investors might very properly look upon the permanent fixation of values as ex post facto legislation. Every decision of the Supreme Court bearing on this matter as well as the rule of reason and justice would point in the direction of confiscation.

With regard to future investments which according to the plan are to be added to fixed capital in the amounts actually and prudently expended, future investors would be well aware that there was to be no adjustment in values whatever might happen to price levels. The same serious objection as to the treatment of past investments would therefore not apply here. Although recognizing the merit in this proposal we are of the opinion that the time is not yet ripe for the adoption of this as a permanent policy.

The fundamental justification for assuming that utility value might remain fixed and still not be subject to the decree of confiscation is that public utility properties are considered to be in a special category, quite different from that of private property. This may reflect a very sound point of view, but it is one that has been consistently left out of account in Supreme Court decisions. One might point to the Baltimore Street Railway decision in which the Court put this street car system on an equal footing with other private industries in the same locality.

It is significant that none of the recognized economists and price experts to whom the fundamental theory of this bill was presented were favorably disposed toward it.

From the legal viewpoint certain arguments have been advanced in support of this plan:

1. That if the economic reasons which are claimed to show the practical desirability and necessity of the plan are fully presented to the Supreme Court that body would be impelled to interpret the law of the land in the light of that necessity. This argument assumes that the Supreme Court has never before had presented to it the arguments of those who insist that the rate base of a public utility should not be determined in accordance with fluctuating values. As a matter of fact the court has had presented to it all sorts of arguments based on grounds of economic theory against a consideration of reproduction costs and in favor of the adoption of the original cost standard. These appear for instance, in the decisions on the rulings of the Interstate Commerce Commission. The Supreme Court has consistently repudiated this doctrine and has held that reproduction costs must be considered in determining the rate base.

2. That a statute which would declare the policy of the State and would attempt by mandatory legislation to enforce upon utility companies what is conceived to be desirable economic policies will so change the nature of vested property rights under

the Constitution that former decisions of the courts will no longer be a guide in determining those rights. This theory does not, however, directly or by implication give legal sanction to the theory that a state by legislative fiat can deprive a utility of a reasonable return upon the fair value of the property which it is devoted to the public service at the time the inquiry is made.

In its decisions the court has in terms declared against the constitutionality of such a plan. The court has consistently held that if the value of the property increases the company is entitled to the benefit of such increase, and if it decreases the company must bear the burden of such decrease. In *McCardle* v. *Indianapolis Water Company,* 272 U. S. 400 (1926), the court said, at page 410:

> "It is well established that values of utility properties fluctuate, and that owners must bear the decline and are entitled to the increase. The decision of this court in *Smyth* v. *Ames,* 169 U. S. 466, 547, declares that to ascertain value 'the present as compared with the original cost of construction' are, among other things, matters for consideration. But this does not mean that the original cost or the present cost or some figure arbitrarily chosen between these two is to be taken as the measuse. The weight to be given to such figures and other items or classes of evidence is to be determined in the light of the facts of the case in hand."

It may be suggested that if the court had in mind that this test of constitutional rights were to be applied only in the absence of a state statute it would have said so. This qualification is customarily announced by the court in those cases to which it applies. However, in what may be considered the one hundred leading cases involving confiscation of public utility property in rate proceedings, this qualification has not once been announced.

The principle that the state cannot by legislative mandate deprive the company of the right to have considered as an element in the rate base any increase in the value of its property is clearly enunciated by the Supreme Court in the cases involving the so-called One Dollar Gas Law of New York. This law consisted in fixing by statute the rate to be charged for a given quantity and quality of gas. The Supreme Court, in upholding the constitutionality of the law (*Willcox* v. *Consolidated Gas Company,* 212 U. S. 19 (1909), stated in its opinion that the law was not so clearly confiscatory that it should be declared unconstitutional before it had been tested out by experience under actual operation. The court was careful to state, however, that if at some time in the future the rate should become confiscatory by reason of changes in the basic value of the company's property, the company would then be entitled to bring another proceeding to determine the reasonableness of the rates. Such a proceeding was subsequently brought and the law was declared by the Supreme Court to be unconstitutional because of the changed conditions. *Newton* v. *Consolidated Gas Co.,* 258 U. S. 165 (1922).

If the legislature may not by statute fix a rate which will in the future be upheld by the courts in the event of an increase in the basic value, it certainly is not clear how the State by legislative fiat could legally fix a base value for existing properties which would not be likewise confiscatory in the event of a substantial increase in values. It appears that this can only be brought about not by a coercive statute but by the voluntary act of the companies concerned.

The discussion so far has been directed only to the question whether or not the Bonbright plan would be invalid as an invasion of the constitutional rights of the companies, but even if any great doubt existed on this point the plan would be held unconstitutional from the standpoint of the state itself. It is a fundamental principle that the state cannot *indefinitely* suspend its sovereign right to regulate the rates of a public utility.

It seems clear that a statute which purported to "freeze" the value of existing properties would substantially deprive the State of its power to regulate rates. Aside from any question as to the wisdom of such a plan it seems to us clearly opposed to the fundamental law both of this State and of the United States.

But even if there were some doubt as to the unconstitutionality of this plan, we would not feel justified in recommending its adoption, for in the view of this doubt it could only result in prolonged litigation. Not only would this in itself be highly undesirable, but if the court did decide against the validity of the plan, as we think it would, the situation would then be much worse than it is today.

B. CONTRACT PLAN

The desirability of stabilizing the valuation and providing the Commission with a definite rate base has led your Commission to propose a series of recommendations which, in some respects, parallel the plan just outlined. In the first place, it is recommended that basic valuations shall be worked out for all utilities in New York State with the exception of steam railways and street railways. The former are omitted because of the jurisdiction over valuations of the Interstate Commerce Commission, and the latter because of their difficulty of earning returns even on book costs. It making an appraisal of other utility companies, it is proposed that book costs and present day costs as well as the other factors prescribed by the law of the land, shall be taken into account. It is believed that the companies should and would cooperate in working out appraisals for their several properties by the aid of which the process of valuation would be greatly facilitated. It is understood, however, that the Public Service Commission, whether through spot-checking or other methods, would be responsible for the final results. It is estimated that this task would occupy three or more years and would require the expenditure of several million dollars. In spite of this large expenditure, it is our belief

that tne benefits to the public would more than offset the amounts to be appropriated.

On the basis of such appraisals, it is recommended that the Public Service Commission be authorized to enter into contractual agreements with the various utility companies concerning base values as of the date of the agreement, which contracts would last for a specified period up to ten years. During this period the amounts of initial valuations for the existing property would remain unchanged except that proper provisions would be made for depreciation and obsolescence.

With regard to investments in new property after the beginning of the period of agreement, it should be provided in the contract that such investments would be entered on the basis of the actual amounts expended by the company, subject to the customary approval of the Public Service Commission. Such sums would be controlled by accounting procedure and added to the amount of the initial valuation, with allowances for depreciation and other approved reserves.

In order to avoid the necessity of too frequent changes in rates, it is further recommended that a rate adjustment reserve should be provided along the lines hereafter described.

Periodic Revision of Valuations. This plan contemplates that at the end of each contract period, new agreements may be entered into by the companies and the Public Service Commission. At the time of making new agreements, it is recommended that the then existing properties would be revalued in the same manner as at the time of initial valuation. This would mean giving consideration to changes in price levels and taking into account any modification in what, for the purpose of convenience, we have called the law of the land governing the factors entering into valuations.

Your Commission has reason to believe that this plan will be in the public interest and that utility managers will find it to be in the interest of their stockholders. It will bring certainty and definiteness into a situation that may now be described as more or less chaotic. It would provide a definate rate base to which the rate of return, as described in the following section, may be applied. It would at all times be subject to exact accounting control.

But in case the management of certain companies is unwilling to enter into such contracts as have been described, the Commission would have initial valuations and would keep them up to date according to accepted methods.

RATE OF RETURN

We recommend:

(1) *That in the case of a contract, a rate of return on the initial valuation shall be agreed upon by the Public Service Commission and the companies concerned.*

(2) *That for future investments the rate shall be fixed for bonds and preferred stocks at the market price received from the purchaser and that for common stocks the Public Service Commission and the companies shall agree upon a reasonable rate of return necessary to attract new capital, with proper allowance for amortization of discount and premiums.*

(3) *That the Commission shall use this method so far as possible as a guide for determining rates of return for companies which do not enter into a contract.*

Present rate procedure is unsatisfactory, not alone in the treatment of valuations, but also in the determination of the rate of return. This is also variable, being subject to shifting conditions which vitally affect the industry.

The guiding principle in determining a fair rate of return is that it must be sufficiently high to secure capital for extensions and improvement of the service. For instance the state of the money market will necessarily influence the rate to be paid in one period or another. Another variable factor is the earning power and financial condition of the Company under investigation. Obviously these circumstances will affect its ability to market securities. Another variable was recently emphasized in the decision of the Supreme Court in the Baltimore Street Railway case (January 6, 1930). It is here set forth that the returns yielded by industries in the same locality and incurring equal risk, should be taken into account.

Despite these variables a review of the decisions of the New York State Commission shows that there has been a preponderant tendency to permit an eight per cent. return. It seems to be accepted among utility managers and generally by the public that eight per cent. is a settled policy with the New York Commission. It is undesirable that the rate of return, on one hand, should be fixed without reference to variables and, on the other, that it should be made merely a matter of judgment, without guiding principles.

Furthermore, the rate of return as now administered applies to the whole of the utility properties, although, according to the customary financial structure the companies are financed to a large extent by senior securities, paying specified and fixed rates of interest or dividends. As a consequence, the common stock, reaping the advantage of the difference between the fixed rate of interest or of dividends on the major part of the investment and the rate of return, may net a considerably larger return than the rates permitted by the Commission or the courts. It may also fluctuate between extremely wide limits and thus introduce an element of speculation that is highly undesirable in the public utility industry.

Under the contract plan which, in this respect, in many ways is similar to the Bonbright plan, it is recommended that an agreed rate would be earned on the total *initial valuation* taking into account the cost of securing capital by the company in recent periods, financial status of the company and other pertinent factors. Provision would also be made that with the retirements

of any indebtedness, bonds or stocks, the amount of return should be diminished by the amount of reduction in the fixed charge or dividend requirement resulting from such retirements.

With regard to *additional investments,* made subsequent to the date of initial valuations, the rate upon each addition would be fixed by the Commission in accordance with the actual and reasonable cost of capital to the company, whether in the form of notes, bonds or preferred stocks, proper allowance being made for amortization of discount and premiums. In the matter of additions paid for through the issuance of common stock and out of earnings distributable as interest or dividends, an agreed rate fixed in the contract would be applied to the total amount of such equity or investment. It is assumed that such a rate would not exceed eight per cent.

After the deduction of the return allowable under the contract for the year, as well as payment of operating expenses, taxes and other charges, properly included in the annual cost of service, the remaining balance for the year shall be credited to the "Rate Equalization Reserve." In case of a deficit this shall be debited to the same reserve. For the purposes of stabilization, the "Rate Equalization Reserve" is to accumulate until reasonable maximum and minimum limits shall be set for the reserve, at which rate adjustments will be automatically fixed by order of the Commission.

It is understood that the accumulation shall be held in trust for the public and that the amount thereof, together with the amount of all other reserves accumulated through charges to operating expense after the date of initial valuation shall be deducted in determining the rate base on any period during the contract.

In case certain companies do not see fit to make such contracts it is recommended that the Public Service Commission use the same method as a guide, so far as possible, for the purpose of determining the fair return on the fair value of the property.

INCENTIVES FOR EFFICIENCY

It is recommended that the Public Service Commission, through its valuation and research staff consider ways and means of stimulating more efficient management (a) by developing standard measurements of efficiency, (b) by devising a scheme of rewards and penalties.

In case of the adoption of a more rigid scheme of regulations there is the danger that the companies may show less initiative in introducing economies and more efficient methods of organization and administration. This danger would increase as regulation becomes more effective. It is further desirable to consider the means whereby the management of the utilities may be stimulated to constantly improve its operating and managerial policies. Although not a matter of legislation, it is suggested that the Public Service Commission, through its research division, should consider the possibilities of improving utility management by offering

rewards for maintaining and improving standards of operation. This calls for the development of measurements of efficiency. Although no such measurements have been worked out and tested in actual experience, it is believed that this is a proper function of regulation and that criteria of efficiency may be devised. The most feasible method of awarding efficiency is in the judgment of the Commission the provision for variation in the rate of return upwards in the case of maintaining higher than the established standards and downwards in case a given company falls below what is recognized as a normal standard.

RATE POLICIES

It is recommended that (1) *the Public Service Commission consider the possibility of improving and making more uniform both rate structures and rate schedules:* (2) *that it investigate the equitableness of rates as between classes of consumers on the basis of cost studies:* (3) *that it stimulate widespread adoption of so-called promotional rates:* (4) *that provision be made for public advertisement and notice to consumers of proposed changes of rates.*

Rate Policies. The policy which determines the total income to be derived from rates is outlined in the preceding sections on Valuation and Rate of Return.

When it comes to the matter of the determination of rates for different classes of consumers and for different localities, the evidence showed that rate structures and rate schedules are in a more or less chaotic condition. A proper determination, for instance, of the rates to be charged one or another class of consumers of the same company calls for a more comprehensive scheme of cost accounting than has yet been worked out. More complete reference is made to this in connection with the accounting section. This is one of the primary tasks to be assigned to the proposed division on valuation and research. Similar studies should also be devoted to the development of a more uniform rate structure, with special emphasis upon the desirability of stimulating consumption by the adoption of promotional rates.

It is our belief furthermore that it is desirable to establish a more uniform level of rates for the same classes of consumers, particularly within the large systems now operating in the State. Inasmuch as preliminary investigations along these various lines are yet to be made, this is obviously not a matter for legislation but it is one which should seriously occupy the attention of the Public Service Commission. The experiments which have been carried on by certain companies go to show that low unit cost to the consumer stimulate consumption and thus not alone increase the service rendered by the public utility to the public but also increase the net revenue of the company itself. It is highly desirable that the Commission use its influence to stimulate progress along these lines.

It is recommended that notice be published of the filing of changes in rates once a week for four weeks prior to the effective

date of such change in one state paper and a paper circulating in the community affected by the proposed rate change; further that notice of such change be given to each consumer with the bill mailed to him thirty days preceding the effective date of the change.

CONTROL OF HOLDING COMPANIES AND TRANSACTIONS BETWEEN AFFILIATED INTERESTS

We recommend:

1. *That the jurisdiction of the Public Service Commission be extended over holders of the voting capital of public utility companies under its jurisdiction to such extent as may be necessary to authorize it to require the disclosure of the identity and respective interests of every owner of any substantial interest in such voting stocks, as recommend relative to "Annual Reports" elsewhere herein.*

2. *That the jurisdiction of the Commission be extended over affiliated interests having transactions, other than ownership of stock and receipt of dividends thereon, with utility companies under the jurisdiction of the Commission, to the extent of access to all accounts and records of such affiliated interests relating to such transactions, including access to accounts and records of joint or general expenses, any portion of which may be applicable to such transactions; and to the extent of authority to require such reports to be submitted by such affiliated interests, as the Public Service Commission may prescribe.*

It is recommended that the amendment designed to carry out the above recommendation shall define "affiliated interests" for this purpose; and for this purpose only, as including:

a. *Every corporation and person owning or holding directly or indirectly ten per cent.* (10%) *or more of the voting capital stock of such public utility corporation.*

b. *Every corporation and person in any chain of successive ownership of ten per cent.* (10%) *or more of voting capital stock;*

c. *Every corporation ten per cent.* (10%) *or more of whose voting capital stock is owned by any person or corporation owning ten per cent.* (10%) *or more of the voting capital stock of such public utility corporation or by any person or corporation in any such chain of successive ownership of ten per cent.* (10%) *or more of voting capital stock.*

d. *Every person who is an officer or director of such public utility corporation or of any corporation in any chain of successive ownership of ten per cent.* (10%) *or more of voting capital stock.*

e. *Every corporation which has one or more officers or one or more directors in common with such public utility corporation.*

f. *Every corporation or person which the Commission may determine as a matter of fact, after investigation and hearing, is actually exercising any substantial influence over the policies and action of such public utility corporation, even though such influence is not based upon stockholders or directors or officers to the extent specified in this definition.*

g. *Every corporation or person which the Commission may determine as a matter of fact after investigation and hearing is actually exercising such substantial influence over the policies and actions of such public utility corporation in conjunction with one or more other corporations and/or persons with which they are related by ownership and/or blood relationship or by action in concert that together they are affiliated with such public utility corporation within the meaning of this definition, even though no one of them alone is so affiliated.*

Provided, however, that no such person or corporation shall be considered as affiliated within the meaning of this definition unless such person or corporation shall have had transactions or dealings other than the holding of stock and the receipt of dividends thereon with such public utility corporation during the two-year period next preceding.

3. *That no management contract or other contract for services with any affiliated interest, as hereinbefore defined, shall be effective unless they shall first have been submitted to and approved by the Public Service Commission; and that the Commission shall be authorized to attach to its approval, in such cases, such conditions as may be required, in its judgment, to secure access to accounts and records and authority to require reports with respect to such affiliated interests not otherwise within its jurisdiction.*

Holding companies and affiliated service agencies have acquired pre-eminent importance in their bearing on the regulation of public utility companies in New York State. It is estimated that 98.5 per cent. of all of the electric power sold in New York State during 1928 was distributed by holding company groups. The reasonableness of inter-company charges for services cannot be judged by a regulatory body without the most complete information as to all features of the transaction, including the cost of service rendered and the profit realized thereon. Our recommendations have therefore been designed primarily to provide complete information to the Public Service Commission, upon the basis of which it may effectively exercise its authority with respect to control of the accounts of the operating companies.

The domination of operating companies by holding companies may in some instances be so complete that the holding company is actually engaged in public utility operation, in which case it should be subject to regulation as a public utility corporation. Where this state of facts actually exist we believe that such regulation may be applied under the present law through disregard of the corporate fiction.

The interests both of consumers and of investors may be abused by the adoption of unsound financial practices by holding companies. We recognize and desire to emphasize particularly these dangers. We recommend that at some future time, when the

results of the investigation of the Federal Trade Commission now in progress relative to public utility holding companies shall have become available, further consideration be given to the problem of proper legislation to avoid these dangers and to afford better protection to investors in these securities.

JUDICIAL REVIEW

We recommend:

That appropriate steps be taken by the Legislature to indicate clearly to Congress that it believes Congressional action should be taken to so amend the Judicial Code as to leave to the State Courts the determination of the local problems involved in rate cases.

That it shall be provided by the Legislature that whenever a suit is brought in the Federal District Court praying for an interlocutory injunction to restrain the enforcement of a Commission order, the Commission may bring a suit to enforce its order in the Appellate Division of the Supreme Court of the State at any time before the final hearing on the application for an interlocutory injunction in a suit in the Federal District Court. When such suit is brought the Appellate Division shall grant a stay of proceedings by the Commission to enforce its order pending the determination of such suit in the courts of the State. Immediately upon the bringing of such suit, the Appellate Division shall cause a notice thereof, together with a copy of the stay granted by it, to be sent to the Federal District Court in which the action was originally begun. Provision should be made for an appeal to the Court of Appeals and for the preferring of this action over others in the Appellate Division.

The history of the New York Telephone Company case has demonstrated the great expense and delay involved in the determination of rate cases by the Federal Courts. To the valuation of the property of the New York Telephone Company the Public Service Commission devoted more than three years. More than 25,000 pages of testimony was collected in formal hearings. Following petitions in equity seeking to enjoin the enforcement of the rates so fixed, the Federal Court appointed a master in equity who proceeded to revalue the property. He conducted 710 hearings at which 609 witnesses gave testimony amounting to over 36,000 pages. Three thousand two hundred and eighty-eight exhibits were presented, several of them consisting of more than one volume and one exhibit filling several volumes. The time necessary for this revaluation exceeded four years (Exhibit 49 and p. 298).

The following summary of the series of events in this case clearly illustrates the evils attendant upon such procedure:

August 20, 1920: Application of company was made to increase rates in New York City. The Public Service Commission instituted a statewide case.

March 17, 1921: Interim Order removed 8 per cent discount and granted company 20 per cent rate increase. This later was reduced 10 per cent on application of the City (Case Nos. 377 and 7720).

March 3, 1922: Commission ordered temporary decreases in rates in New York City and most upstate exchanges. The Federal Courts, by order dated June 12, 1922, abrogated these two orders.

January 25, 1923: Commission issued order increasing by 5 per cent rates to be charged in New York City and balance of State.

January 23, 1924: Company applied to Commission for increases throughout the State.

February 1, 1924: Company petitioned for immediate temporary increases of $7,500,000, but this was denied by Commission July 17, 1924.

April 26, 1924: Company asked Federal Court to restrain enforcement of Commission's rates and asked 14½ per cent increase throughout the State pending permanent injunction.

May 1, 1924: Judge Knox granted and Statutory Court confirmed temporary injunction allowing 10 per cent surcharge on rates in New York City but no increase upstate.

September 2, 1924: Special Master appointed to consider confiscatory issue. Began hearings October 14, 1924, and issued report March 11, 1929. Meanwhile Public Service Commission continued hearings on application for permanent increase filed January, 1924.

May 26, 1926: Commission ordered $11,095,373, or about 16 per cent increase in rates in New York City but none upstate.

August 10, 1926: Company complained to Court about this decision and Court directed that this complaint be referred to Federal Judge who had appointed the Special Master.

March 11, 1929: Report from Federal Judge to Court practically sustained company's claims. It was estimated that these recommendations would add about $20,000,000 to State's annual telephone bill.

May 8, 1928: Master's decision argued before Statutory Court.

November 7, 1929: Statutory Court issued opinion drastically reducing the valuation set by the Master, cutting the rate of return to 7 per cent as compared with 8 per cent allowed by the Master.

December 27, 1929: Actual date of the order issued by the Statutory Court on the basis of the above opinion.

January 27, 1930: Telephone Company announced new rate schedule which it claims is based on order of Statutory Court with $133,000,000 added to the rate base to bring it up to June 30, 1930.

January 29, 1930: Telephone Company summoned to Albany by Public Service Commission for hearing on new rates which it refused to file with Commission on ground they are merely a carrying out of a Court order.

January 31, 1930: Public Service Commission announced temporary rate schedules, involving slight reduction of proposed company schedule.

February 1, 1930: Temporary new rate schedule goes into effect (pp. 2758–9).

The procedure in the Federal courts which thus permits all the issues in a case to be tried over again before a master, after they have already been presented before the Commission, robs the State tribunals of the right to make determinations upon important local problems which these tribunals should not be required to surrender. Congress should not permit the Federal courts to deprive the people of this State of a determination of their interests by their own courts.

An immediate remedy is, however, essential and we believe that this remedy can be found by State legislation.

Section 266 of the United States Judicial Code first prescribes the procedure for the entertainment of petitions for interlocutory injunctions in the Federal courts, and then closes with the following language:

> "It is further provided that if before the final hearing of such application a suit shall have been brought in a court of the state having jurisdiction thereof under the laws of such state, to enforce such statute or order, accompanied by a stay in such State court of proceedings under such statute or order pending the determination of such suit by such state court, all proceedings in any court of the United States to restrain the execution of such statute or order shall be stayed pending the final determination of such suit in the courts of the State. Such stay may be vacated upon proof made after hearing, and notice of ten days served upon the attorney general of the state, that the suit in the state courts is not being prosecuted with diligence and good faith. The requirement respecting the presence of three judges shall also apply to the final hearing in such suit in the district court; and a direct appeal to the supreme court may be taken from a final decree or denying a permanent injunction in such suit."

Under the present State laws it is not possible for the Commission to take advantage of the above section, due to the absence of the Commission's order pending the determination of a suit in the courts of the State. Such a stay is essential for the effective operation of this section of the Federal Judicial Code. Section 266 was enacted by Congress in recognition of the fact that under certain circumstances principle of comity should control the Federal courts in the exercise of their jurisdiction. We believe that appropriate legislation should be passed to enable the State to take advantage of the opportunities thus offered, and we recommend accordingly.

PEOPLE'S COUNSEL

We recommend that:

A people's counsel be appointed as a deputy attorney-general at an adequate salary whose duties shall be specified by statute providing that he devote himself exclusively to advancing and representing the public interest in utility matters, and further that he have the cooperation of the Public Service Commission and its staff in such investigations as he may see fit to carry on.

In view of the necessarily somewhat judicial character of the Public Service Commission and the consequent difficulty of combining judicial functions and what may be termed prosecuting functions, it has seemed desirable to us to recommend the appointment of an official who will be specifically charged with the responsibility of representing the consuming public, whether individual consumers or municipalities, in connection with utility problems. He should be empowered to investigate complaints, to initiate inquiries where they seem in his judgment to be called for, to assist consumers in the preparation of cases either before the Commission or in the courts, and actually to become their spokesman in formal proceedings when they request it. These duties are to be specified in the statute creating the office.

The people's counsel is to have the cooperation of the Commission and its staff in connection with the investigations referred to above.

COMMISSION'S STAFF AND APPROPRIATION

A. Staff [1]

We recommend that:

(1) *An additional appropriation of $120,000 be made to the Public Service Commission (a) for the expansion of its present staff, (b) for the proposed valuation and research division, (c) for the hearing deputies.*

(2) *That an immediate preliminary survey be made by the Public Service Commission as to its personnel and other requirements for carrying through a valuation of all utilities in the State with the exception of the steam railways and street railways, and further that an initial appropriation of not to exceed $1,000,000 be made to meet the expenses of the valuation for the present year.*

(3) *That an investigation be made of the salary conditions in the Public Service Commission looking toward the classification of positions and standardization of salaries.*

[1] See Counsel's Report, pp. 40, II.

ADEQUACY OF STAFF

The evidence presented before the Investigating Commission clearly discloses that the increase in staff has not kept pace with the expansion of the utilities nor with the new functions imposed upon it by the law and that it must be further increased because of the changes proposed in the recommendations embodied in this report.

According to our record, the annual requests by the Commission for appropriations to cover the salaries of additional members of the staff have not been at all commensurate to the needs of the Commission. It appears that, with the exception of one class of position, the annual requests for additional positions have been granted for the most part by the Legislature. Our investigation shows that additional accountants, engineers and inspectors are specifically needed.

VALUATION AND RESEARCH DIVISION

It is recommended that $35,000 *be provided for a research division in the Commission both for the permanent staff and the temporary staff required to make a complete appraisal of the utility properties in the State, as provided elsewhere; that the head of this division report directly to the Commission and receive a salary of* $10,000.

All of the members of the Public Service Commission were agreed that it would be desirable if a special research division be set up in the Commission for the purpose of making investigations in the "long run problems," such as the following: Valuation, cost accounting, rate structures, equitableness of rates between different classes of consumers, measurements of efficiency and the like. Under the condition of the above recommendation for a complete appraisal of all utilities in the State, the research division would have to be temporarily expanded for this purpose.

It was proposed that this staff consist of eight employees, four of whom shall be engineers and accountants. It has already been recommended that the proposed valuation of all utilities should be financed through a clerical appropriation.

HEARING DEPUTIES

It is recommended that provision be made for one or more qualified Hearing Deputies.

On account of the large number of public hearings conducted in the course of the year by the Commission, the time consumed in such hearings, and the further fact that frequently regular members of the staff are appointed as Hearing Deputies, thus taking these from their regular duties, it is proposed that one or more such deputies be appointed to the Commission for the purpose of relieving its members in the hearings of less important cases and making it possible for the Commissioners to give their attention

to the cases involving large issues and general matters of policy. The salary of such deputy or deputies should be sufficient to attract properly qualified men.

SALARY POLICY

It is recommended that a systematic investigation be made of the salaries paid the employees of the Public Service Commission, in connection with the analysis of the duties of the various positions, for the purpose of bringing about an adequate and standardized salary scheme with the provision of an adequate minimum and maximum salary for each position and intermediate steps that will make possible recognition of increased efficiency.

Analysis of the salaries paid the staff of the Public Service Commission, indicates that there is a lack of proper classification and standardization of salary rates, and further, that certain employees are receiving less than an adequate wage, and others less than the character of their positions required. It also appears that there is no systematic policy of increasing salaries in accordance with the accepted policy of providing steps within a range from the minimum to the maximum in accordance with the increasing efficiency of the employees.

Comparison with like workers in other departments shows that in some cases the staff members of the Public Service Commission are receiving more, and in other cases, less, than the salary rates paid in comparable positions.

B. Appropriations

According to the records, the appropriation to the Commission for the current year was $932,585.04. Although this is a large sum, it will not appear so when it is considered that the securities approved by the Public Service Commission up to and including 1928, exceed three billions of dollars. This figure may be looked upon as a crude measurement of the scope of the Commission's responsibility. (See Tables of Counsel's Report, p. 48.) According to a summary table, the increase in appropriation has been in the neighborhood of $160,000 in the years 1924 to 1930. When one considers the extent of the development of utilities, mergers and the like in this same space of time, it seems clear that this increase is not adequate for the proper performance of the Commission's functions. For these reasons a number of recommendations for increased appropriations have been made in several sections of this report.

ACCOUNTING CONTROL

We recommend:

1. *That the Public Service Commission Law be amended so as to place the burden of proof upon the utility company to justify every accounting entry that may be questioned by the Commission; and to authorize the Commission to suspend any such charge or credit pending the submission of such proof.*

2. *That the provisions relating to annual reports be amended so as to require the complete disclosure of the actual owners of the voting capital stock of every public utility company.*

3. *That more frequent field audits of fixed capital and operating expense accounts of the companies under the jurisdiction of the Commission be made.*

4. *That the Research Bureau proposed elsewhere herein be given as one of its principal tasks the conduct of intensive studies of cost of service, rate structures and cost accounting.*

5. *That the Commission give consideration to the modification of the existing accounting procedure relative to appliance sales and jobbing work.*

6. *That the Public Service Commission Law be amended so as to give the Commission full authority over the methods of computation and amounts of all charges to operating expense accounts and offsetting credits to reserves for any purpose whatever, including provision for depreciation or retirements.*

It is of the highest importance for effective regulation of public utilities, that the accounting records of the companies shall record in suitable form all of the facts required by the Commission for the exercise of its regulatory powers; that the Commission shall be fully advised by periodical reports and field audits as to whether such records are actually being kept in accordance with these requirements; and that such records when kept shall be utilized by the Commission to the fullest possible extent in the performance of its duties.

One of the most effective instruments which the Commission has for regulation through accounting control, is the power "after hearing to prescribe by order, the accounts to which particular outlays and receipts shall be entered, charged or credited." In order to make this more effective and to clarify the power of the Commission in this regard, it is recommended above that Sections 52, 66, Subds. 9, 80, Subds. 7, and 95, Subd. 2, be amended so as to provide that the burden of proof be placed upon the company to justify every such entry, charge or credit as may be questioned by the Commission; and that the Commission be authorized to suspend any such charge or credit pending the submission of such proof.

Annual Reports

The actual identity of the persons owning, directly or indirectly, substantial interests in the voting capital stocks of companies under the jurisdiction of the Commission, should be fully disclosed in order that their relationship may be more clearly understood.

We recommend that sections 46, 66, subds. 6, 80, subds. 5, and 95, subd. 1, of the Public Service Commission Law be amended to provide

1. That all annual reports shall state, in addition to the information already required, the names and addresses of, and the number of shares held by each holder of 1 per cent., or more of the voting stock of the reporting company.

2. That where such stock is held by a trustee or trustees, or other intermediate agency for the beneficial interest of an owner or owners, other than the holder, or by a corporation, such annual report shall state, if the information is available from the records of the reporting company, the names and addresses and respective interests of such beneficial owners, or the names and addresses and respective stockholdings of the officers and directors, and of each stockholder holding 1 per cent., or more of the stock of such stockholding corporation; and shall be accompanied by certified copies of any trust agreements or other instruments under which any of such stock is held.

3. That where such information is not available from the record of the reporting company, every such holder of 1 per cent. or more of the voting stock of such reporting company shall be required, when directed by the Commission, to file a sworn statement upon such form and within such time as may be prescribed by the Commission setting forth whether or not any of the stock so held is for the beneficial ownership of any person, firm or corporation other than the holder thereof; the names and addresses and respective interests of such beneficial owners. If such stockholder is a trustee, he shall also submit with such statement a certified copy of the trust agreement or other instrument under which such stock is held. If each such stockholder is a corporation, it shall in addition file a sworn statement showing the names, addresses and respective stockholdings of its officers and directors, and all stockholders holding 1 per cent. or more of the voting stock of such stockholding corporation.

4. That the same provision shall apply to successive owners of beneficial interests or of stockholdings in any chain of ownership or control to the end that the Commission may require the complete disclosure of the natural persons, firms or corporations and their respective interests who own or control, directly or indirectly, 1 per cent. or more of the voting stock of any company required by law to submit an annual report to the Public Service Commission.

Field Audits

Field audits have in effect been restricted in the past to the examination of fixed capital accounts when required by capitalization cases, and examination of operating expenses accounts when required by rate cases. There can be no doubt that more frequent field audits would contribute to effective control by the Commission and that it would be desirable, if possible, that such audits should cover the fixed capital and operating expense accounts of the companies under the jurisdiction of the Commission at least every two years.

Several striking examples of the necessity of such audits were presented to us in the testimony. Perhaps the most striking is the case of the New York Edison Company and certain other com-

panies of the Consolidated Gas Company group which paid a total of $1,302,782 during the period 1918-1929 to Mr. Benjamin F. Witbeck for services in securing reductions in the special franchise taxes payable to the states. These payments are stated to have been charged to operating expense account but it is said that the Public Service Commission has excluded them from operating expenses in certain rate cases. These transactions, however, strongly emphasize the need of close supervision of accounts by field audits.

We recommend to the Commission that such field audits be made and we recommend to the Legislature elsewhere herein that the staff of the Commission be increased to make this possible.

Cost Accounting

More adequate cost accounting showing particularly for the electric companies, the cost of service to different classes of the consumers is desirable. It it not possible, however, with the knowledge now available, to make any specific requirements in this respect.

We recommend that the conduct of intensive studies of cost accounting, cost of service and of rate structures, be one of the principle objects of the special research bureau of the Public Service Commission to which reference is made elsewhere herein.

We also recommend the desirability of improvment in the method of recording and reporting in the classifications of accounts and in annual reports, numbers of consumers, consumption and revenues of various classes of consumers.

Appliance Sales

The accounting classifications of the Public Service Commission for gas and electric corporations permit these companies the option of selling gas or electric appliances at or below cost for the purpose of stimulating the use of gas and electricity, and charging the loss to operating expense as "New Business Expense;" or to conduct jobbing and merchandising operations primarily for profit, in which case they are accounted for as a separate department. Complaints have been made by independent appliance dealers that the sale of appliances at a loss constitutes unfair competition.

The present procedure is undesirable and we recommend that jobbing and appliance merchandising operations shall be accounted for in all cases as a separate department, which shall be charged with the proper proportion of overhead or joint expenses, and no part of the expense thereof shall be charged to operating expenses of the utility services.

Depreciation or Retirement Accounting

The Public Service Commission now has authority to prescribe uniform methods of accounting for depreciation or retirement; but under a decision by the Court of Appeals, it is claimed that the Commission does not have the authority to prescribe the basis of computation or the amount that may be charged to operating expense and credited to reserve for this purpose.

In the face of the conflicting views now prevailing, it is not desirable to lay down any universal rule as to the method of computation or amounts of such charges and credits. The Public Service Commission, however, should be given full authority over the method of computation and amounts of all charges to operating expense accounts and offsetting credits to reserves for any purpose whatever, including provision for depreciation or retirement.

We recommend therefore, that amendments be adopted providing that all utilities under the jurisdiction of the Commission shall submit to the Commission for its approval proposed rules specifying the classes of property or accounts with respect to which it is proposed to make charges to operating expense and credits to reserve for depreciation or retirement, and the percentages of depreciation or retirement expense which it is proposed to charge with respect to each of such classes of property or accounts; that the Commission shall have authority to approve such rule with or without modification and to modify such rule after hearing, either on application or on its own motion; and that no such charge to operating expense and credit to reserve shall be made except in accordance with such a rule approved by and to an amount subject to the approval of the Public Service Commission. Similar provisions should apply to charges to operating expense account and offsetting credits to reserve for other purposes than depreciation or retirements.

SECURITY AUTHORIZATIONS

We recommend:

1. *That the period within which a gas or electric corporation can apply for issue of securities for reimbursements purposes be changed from ten to five years.*

2. *That the provisions of the Public Service Commission Law relative to the securities of telephone and telegraph corporations be modified so as to make them substantially uniform with those applicable to other types of utilities.*

3. *That the Public Service Commission Law be amended so as to prohibit more clearly the issue of securities in payment of dividends or for any purposes other than those enumerated in the statute; to provide that no change in the priority or voting rights of the capital stock of any utility corporation shall be made without the approval of the Commission; to provide for receivers' certificates in addition to the types of securities already provided for; to provide that the provisions relating to issue of securities shall apply to the re-sale of securities previously issued and subsequently reacquired; and to prohibit any utility corporation from crediting a portion of the proceeds of the sale of non par stock to capital and a portion to surplus, or from transferring any portion of its stated capital to surplus.*

4. *That the Public Service Commission Law be amended so as to limit the amount of short term notes that can be issued without the approval of the Commission to five per cent (5%) of the stated value of the securities outstanding, and to require the filing of certificates of notification within ten days after the issue of any securities, including short term notes.*

The changes in the law recommended above are designed to bring about the strengthening of the control of the security issues of public utility corporations and to make the provisions of the law relating to the securities of different classes of utility corporations more nearly uniform. A summary and explanation of these amendments are given below.

1. That section 69 of the Public Service Commission Law be amended so as to change the period within which a gas or electric corporation can apply for issue of securities for reimbursement purposes from ten to five years.

2. That section 101 of the Public Service Commission Law be made substantially uniform with sections 55, 69 and 82 by eliminating the sentence, "No telegraph corporation or telephone corporation shall be required, however, to apply to the Commission for authority to issue stocks, bonds, notes or other evidence of indebtedness except for the acquisition of property, the constructions, completion, extension or improvement of its facilities, or the improvement or maintenance of its service within the State, or the discharge or refunding of obligations or reimbursement of moneys actually expended for such purposes."

3. That sections 55, 69, 82 and 101 of the Public Service Commission Law be amended so as to provide that the Commission shall not authorize the issue of any securities in payment of dividends or for any purposes other than those enumerated in the statute.

4. That sections 55, 69, 82 and 101 of the Public Service Commission Law be amended to provide that no change shall be made in the priority or voting rights of the capital stock of any corporation within the jurisdiction of the respective sections without the approval of the Public Service Commission even though such change may involve no change in the total stated capitalization of the corporation.

This will strengthen the control intended to be granted to the Commission by law over the acquisition of interests in the control of public utility corporations and will add to the protection of investors in utility stocks by preventing the shifting and qualification of voting rights and the changing of priorities which have occurred in either types of corporations from being practiced by public utility corporations.

5. That sections 55, 69, 82 and 101 of the Public Service Commissions Law be amended by adding the words, "or receivers certificate," after the words "after the date thereof" in the fourth, fifth or sixth lines of such sections.

6. That sections 55, 69, 82 and 101 of the Public Service Commissions Law be amended by adding a provision that the issue of

securities as referred to therein, shall include the sale by a corporation of securities previously issued in accordance with the terms thereof and subsequently reacquired by such corporation.

7. That sections 55, 69, 82 and 101 of the Public Service Commissions Law be amended by adding to the phrase excluding from the jurisdiction of the Commission short term notes or evidence of indebtedness payable in less than one year, the words "and aggregating (together with all other outstanding notes and evidence of indebtedness payable in less than one year) not more than five per centum of the stated value of the securities of the corporation then outstanding," and by adding also a provision that within ten days after the issue of any such notes or evidence of indebtedness, the corporation issuing the same shall file with the Commission a certificate of notification in such form as may be prescribed by the Commission.

It is apparent that unrestricted issue of short term notes, without notice to the Commission, except through the medium of annual reports might bring a utility corporation into a financial situation threatening the maintenance of service, without opportunity for the application of remedial measures which might otherwise be invoked. Prompt notice to the Commission of the issue of short term notes for construction purposes and interest rates thereon will also add to the effectiveness of the exercise of the Commission's control of accounting through the designation of the accounts to which particular outlays may be charged.

8. That the Public Service Commissions Law be amended so as to prohibit any utility corporation from crediting a portion of the proceeds of the sale of non-par stock to capital, and a portion to surplus; and also from transferring any portion of its stated capital to surplus.

9. That sections 55, 69, 82 and 101 of the Public Service Commissions Law be amended so as to provide that whenever any securities are issued in accordance with the approval of the Commission under the provisions of this section, the issung corporation shall, within ten days after such issue, file with the Commission a certificate of notification relative thereto in such form as may be prescribed by the Commission.

REORGANIZATIONS, MERGERS, TRANSFERS OF FRANCHISES OR PROPERTY AND ACQUISITIONS OF STOCK

We recommend:

1. *That the Public Service Commissions Law be amended so as to place street railway and telephone corporations on the same basis as other utilities with respect to sale of any part of their property.*

2. *That the Public Service Commissions Law be amended to provide that the consent of the Commission shall not be given to the acquisition of any stock of a public utility corporation for which its consent is necessary unless it shall have been affirmatively shown that such acquisition is in the public interest.*

3. *That the provisions of the Public Service Commissions Law requiring the approval by the Commission of the acquisition of ten per cent. or more of the capital stock of a utility corporation be changed to refer to ten per cent. or more of the voting capital stock.*

4. *That telephone and telegraph companies be placed on the same basis as other utilities with respect to the acquisition of their stocks by other telephone and telegraph companies.*

5. *That the Public Service Commission give consideration to the inconsistency of certain of their past decisions with respect to the method of fixing the book value of stocks of one utility company acquired by another utility company.*

Reorganizations, Consolidations and Mergers

We recommend that sections 55a, 69a, 82a and 101a, relating to reorganizations, be amended so as to correct the erroneous references to sections "nine and ten of the stock corporation law" so as to read "ninety-six and ninety-seven of the stock corporation law."

It appears that there is no necessity for the amendment of those sections of the Public Service Commissions Law relating to consolidations and mergers.

Transfers of Franchises or Property

A street railway or a telephone corporation can now sell any part of its property which does not affect its franchise, either to another utility or to a non-utility without action by the Public Service Commission. In order to correct this defect and to place street railways and telephone corporations on the same basis as gas and electric corporations, we recommend that section 54, subd. 1, and section 99, subd. 2, of the Public Service Commissions Law be amended by adding after the words "whatsoever" and "whatever" in the fifth and sixth lines thereof respectively, the words "nor shall the works, system or property or any part of the works, system or property thereof be transferred or leased."

We also recommend that the word "or" after the word "franchise" in the first line of section 99, subd. 2, be changed to "nor"; and that the word "whatever" in the fifth line of section 99, subd. 2, be changed to "whatsoever."

Acquisition of Stock

The Public Service Commission has stated its policy to be that it will not approve any application for the acquisition of stock of a utility corporation unless it is affirmatively shown that such acquisition will be in the public interest.

This policy is not based upon any legislative declaration in the present statute. We consider it desirable that such a policy shall be continued and supported, and we recommend therefore that sections 54, 70, 83 and 100 of the Public Service Commissions Law be amended by adding a proviso in each case that "no consent shall be given by the Commission to the acquisition of any stock in accordance with this section unless it shall have been affirmatively shown that such acquisition is in the public interest."

We call attention to the fact that the policy of the Public Service Commission in requiring that securities issued by one public utility corporation in connection with the purchase of the capital stock of another utility corporation shall be substantially on the same basis that controlled the issue of securities so acquired, has not always been consistently applied. Examples of such inconsistency appear in the record. We recommend that such inconsistency be avoided in the future and that consideration be given by the Commission to the question of whether or not any of its past orders should be amended so as to bring them in accord with this policy. This will require the application of a uniform practice with respect to the deduction of reserves resulting from charges to operating expense in determining the book value of purchased capital stocks.

A recent decision of the Supreme Court in the New York Electric Company case had created a serious doubt as to whether the provisions in the law requiring the approval by the Commission of the acquisition of ten per cent. or more of the capital stock of a utility corporation, might now be in effect evaded and the entire voting control of such a corporation transferred without the approval of the Commission by placing the voting rights in a class of stock representing less than ten per cent. of the total capital stock. Such evasion should be prevented and we accordingly recommend that sections 54, 70, 83 and 100 of the Public Service Commissions Law be amended so as to change the reference "more than ten per cent. of the total capital stock," to read "more than ten per cent. of the voting capital stock" in each case.

We recommend that telephone and telegraph companies be placed on the same basis as other utilities with respect to acquisition of their stocks by other telephone and telegraph companies. This can be accomplished by adding, at the beginning of section 100, "No telegraph corporation or telephone corporation, domestic or foreign, shall hereafter purchase or acquire, take or hold any part of the capital stock of any telegraph corporation or telephone corporation organized or existing under the laws of this state unless authorized so to do by the Commission."

REPARATIONS

We recommend:

That a reasonable procedure be provided by law for the collection of reparation when rates have been declared unreasonable or discriminatory.

The Public Service Commission Law makes no adequate provision with respect to reparations or the recovery of refunds on account of the collection of charges which have been determined to be unreasonable or discriminatory. This is equally true with

respect to rates collected from shippers by railroads and with respect to rates collected from consumers of electric, gas, steam, telephone and telegraph service.

We recommend that the Commission be authorized on application to order refund in such cases of rates collected within a period of two years, with the option on the part of the shipper or consumer to sue for reparation in the courts, in which case the order finding the rate unreasonable or discriminatory should be prima facie evidence of this fact.

We also recommend that where rate payments are matters of record, the Commission be authorized when determining a rate to be unreasonable or discriminatory, to issue a reparations order requiring the repayment of all such excess rates collected within a period of two years from all shippers or consumers of record who are still taking service and have done so continuously throughout such reparation period. In such case, procedure should be provided for public advertisement of reparations due other shippers or consumers, for payment on application to the company, accompanied by proper identification and proof, and for final discharge of all remaining liability for reparations after a period of two years and after full compliance with the requirements of the law to the satisfaction of the Commission.

SUB-METERING

We recommend:

(1) That sub-metering companies be prohibited under the law from charging higher rates than those set for like service by the local electrical companies; (2) that they be required to pay the legal rate of interest upon deposits of consumers; (3) that these electrical meters be subject to the inspection of the Public Service Commission in the same manner as the meters of other public utilities.

Sub-metering is the term applied to the metering and resale to tenants at retail prices of electric current purchased at wholesale prices by the landlords of large buildings. For the purpose of distributing the current thus resold to tenants the landlord usually employs an outside agency called a sub-metering company to install, maintain and test the sub-meters and to bill and collect the retail price from the tenants. The landlord may procure his electric current either by purchase from an electric company or by generation from his own private plant. An element of competition, therefore, exists between electrical companies and the landlord who establishes his private plant.

There are now over 7,500 sub-metered buildings in Manhattan alone, with about 150,000 sub-meters in use. The capital invested in the business may be estimated roughly at $8,000,000. It has been asserted that the growth of this industry was partly traceable to a one time vigorous sales campaign on the part of electrical companies. This industry involving as it does extensive financial and capital programs should not be abolished without proper consideration being given to such investments, particlarly when abolition

is urged by those whose policy during the past years has been to induce the development of the business in order to prevent competition arising from the operation of private plants.

The question arises, however, as to whether those engaged in sub-metering are, in fact, public utilities, or, in fact, so affected by a public interest that they should be regulated with reference to the principles of a fair return on a fair value, involving as it would, rate adjustments in the bases of investment and operating expenses. We are convinced that the interests of the consumer as to rates and service, should receive some protection under the existing situation and to this end we believe that the above recommendations should be provided for by appropriate legislation.

INTERSTATE TRANSMISSION

We recommended that a special investigating body be appointed to make proper recommendations concerning the best means of bringing about regulation and control of the utilities engaged in interstate transactions, whether by compact or some other methods. Further, that the same body shall make a general survey of the power needs of this State, and the possibility of unifying services with other states.

The Public Service Commission records show that there has been a steady increase in the amount of the electricity exported from and imported into the State during recent years. In view of the development of the holding company system, there is reason to believe that interstate transmission will steadily expand. According to a Supreme Court decision (Public Utilities Commission v. Attleboro Stem & Electric Co., 273 U. S. 83), the Public Service Commission has no jurisdiction when electricity is sold by one company to another for resale to consumers. As information on all costs is essential to proper regulation, some measures should be taken for securing the requisite data, even though the supplying company operates in another state.

There is a bill pending in Congress concerning the regulation of interstate transmission of power providing for joint boards upon which the States involved would have proper representation. This or some other measure looking toward compact arrangements between States would meet many problems arising from interstate transmission, as well as other utility transactions involving two or more States.

The interconnections and expansion of the system for supplying electricity to the whole state should not be left to chance or the interests of various utility organizations. The problem of developing an integrated system of supply and distribution over the state as a whole shold be considered as a unified plan, for the purpose of utilizing the best and most economical sources of supply. This would necessarily lead to a consideration of the relation of the needs and resources of New York State with reference to the bordering states. This latter proposal involves some agency on which would be representatives of the states concerned.

REGULATION OF MOTOR CARRIERS

We recommend:

(1) *That legislation be enacted to confer explicit statutory authority for regulation by the Public Service Commission of motor carriers to be included in the Public Service Commissions Law.*

(2) *That provision be made for an adequate number of inspectors on the Commission's staff to make periodic inspections of motor buses.*

(3) *That a certificate of convenience and necessity from the Public Service Commission should be required, as it is now, and in this connection the Commission should have power:*

(a) *To refuse a certificate unless reasonable regulatory conditions are complied with in respect to franchise provisions.*

(b) *To revoke a certificate in the event of noncompliance with any of its provisions or of failure to comply with an order of the Commission or for violation of any provision of law.*

(c) *To approve or disapprove the transfer or assignment of such certificate.*

(4) *That cities, towns and villages should be proper parties to any proceeding in regard to a certificate of convenience and necessity.*

(5) *That the Commission should have the same authority as to rates, service and security issues as it now possesses for other utilities, including the power to approve securities, evidences of indebtedness or long term debts, outstanding or to be issued.*

(6) *That in regard to buses operating through two or more local government units:*

(a) *The Commission should have power to issue a certificate of convenience and necessity without local consent if such consent is unreasonably refused or withheld, or if unjust or unreasonable conditions are attached to the granting of such local consent. In such event the Commission should have the power to order such terms and conditions as it may deem just and reasonable.*

(b) *All towns and villages coming by resolution under the terms of section 66 of the Transportation Corporations Law (as provided in section 67 of said law), should be required to file notice to that effect with the Public Service Commission.*

(c) *Consents for inter-city bus service should be transferable for an unlimited period.*

(d) *Local authorities should not be permitted to impose a charge for granting the consent to inter-city buses, but should receive a payment from the bus operator in the form of a tax.*

(7) *That there should at present be no regulation of motor trucks as a public utility.*

The Public Service Commission has not been given general supervision over motor carriers. Any additional legislation, together with existing provisions, should be enacted into a separate article to deal with this problem. The very nature of the motor transportation industry with its different and changing needs calls for separate treatment by the Legislature.

Motor buses operating in street transportation confined to a single city or village, should be subject to somewhat different regulation than is imposed upon buses operating from city to city. Where the bus is engaged in local service, interest in the adequacy and convenience of the service is confined almost solely to the people of that locality, but in the case of cross country operations, the people of many localities are interested in the service. Such buses should be regarded as links in a statewide chain of communication and should be freed from such local action as would unreasonably hamper the effective integration of the states motor facilities.

In order to make effective the regulatory conditions which are inserted in the certificate of convenience and necessity, the Public Service Commission should have authority to revoke the certificate in case of non-compliance with its provisions. The nature of the capital equipment of the motor carrier is such that the revocation of the certificate and the consequent discontinuance of the service neither destroys the value of the equipment, nor does it indefinitely deprive the public of motor service. A survey of the statutes of twenty-five other states reveal that it is a common practice to vest in the regulatory body, power to revoke the certificate of convenience and necessity. It is also important that the Public Service Commission be given authority to prevent the passage of motor routes into irresponsible hands. This may be accomplished by giving the Commission power to approve or disapprove the transfer of the certificate.

The Public Service Commission may not now consider a petition for a certificate of convenience and necessity until the required consents have been secured (Transportations Corporations Law, Section 66). It appears that the development of through motor transportation between points within the State, has been materially hampered by the requirement that the operator obtain such consents from every city and most of the villages and towns which he traverses. Specific instances of the abuse of this power by local government units are set forth in the Report of the Counsel. These abuses take the form either of unreasonable withholding of the local consent, or of attaching to the granting of such consent conditions which are detrimental to the interests of both the motor carrier and the people of the State and even the municipality itself. It therefore seems desirable to place some limitation upon the withholding of such consents, or the imposition of improper conditions to the granting of consents. However, there should be preserved to the municipality its present authority under the police power, to subject the motor carrier to such reasonable regulations as are

designed to protect the comfort, safety and convenience of its inhabitants.

In case the local authorities do not either grant or refuse the application for consent within thirty days, their failure to act should stand as an approval of the application. There should be assurance that no consent would expire prior to the hearing for a certificate of convenience and necessity, provided the petition for such certificate is filed within ninety days after the granting of consent. If the petition for the certificate is finally denied, after opportunity for rehearing and appeal, all consents should automatically expire.

The local authorities should be denied the power to make a charge for the granting of the consent. Such charges as are now made are in many cases a severe drain on the earnings of the operator, and require a highly complicated system of accounts.

The local communities should however receive a payment from the bus operator which should be in the form of a tax. The charge should be uniform and levied according to some index fixed by the statute, such as route miles, bus miles, passenger miles, total passengers, etc.

The Public Service Commission cannot, with its present staff, carry on adequate inspection of motor buses. It is recommended that sufficient additional men be added to the staff of the Public Service Commission for the purpose of inspecting motor and rail equipment.

CONTROL OF PRIVATE WATER COMPANIES

We recommend:

That private water companies should be subjected to State control in the same manner as other utilities, that is, in regard to:

(a) *Rates. All tariffs for water should be placed on file with the Commission and the Commission should be given power to order changes.*

(b) *Service.*

(c) *Financing. The issuance of securities should be subject to the jurisdiction of the Commission.*

(d) *Uniform Accounts.*

(e) *Annual Reports.*

(f) *Suspension. Annulment or Cancellation of Certificate.*

(g) *Investigation of Complaints.*

The Conservation Department should retain its present powers and should continue to issue the certificate of convenience and necessity with the proviso that the Water Power and Control Commission should certify the record of each company to the Public Service Commission when the company is ready to operate.

We recommend, however, that private water companies with a property value of $10,000, or less shall be excluded from Commission regulation, except that they shall be required to file an annual report and be subjected to such accounting supervision as the Commission may prescribe.

We recommend that there be no control over municipal systems except that they should be required to file an annual report and install such a uniform accounting system as the Commission may prescribe.

There are 376 municipal and 232 private water companies operating in the State (State Health Department, June 30, 1929).

Water companies now are not under the jurisdiction of the Public Service Commission. They are subject to a certain measure of control by the Water Power and Control Commission and the Department of Health. The Water Power and Control Commission may approve or reject plans for a water system; it may inspect the service before it is started and the Department of Health has authority to make periodic inspections of the water supply of any community in the State and may order changes in the method of operation.

After the company is under way, there is no control of rates, no regulation of service and a financial policy may be pursued which is opposed to the best interests of the community.

The nature of the private water company business within the last few years has been rapidly changing. This is due largely to the consolidation of various companies and the extension of holding company control. It is estimated that these companies serve 13 per cent of the population of the State. Although this service is a vital necessity, the only recourse against abuses is for the municipality to enter into competition with the private company. It has been urged that this would mean a considerable investment and duplication of service with resultant waste.

Due to the circumstances of local control through political action it has not been seriously contended that control should be exercised over municipal systems except that they be required to file an annual report and to install a uniform accounting system so that the actual costs of the water department and the municipal government be kept separate.

TELEPHONE COMPANIES BELOW $10,000 PROPERTY VALUE

We recommend that telephone companies of less than $10,000 *property value, operating for profit, should be subject to the supervision of the Public Service Commission which would set up a simplified system of accounting and reporting suitable to the character of the companies regulated.*

At present all telephone companies not having a property value of $10,000, or which are not operated for profit, are not under Commission control. (Ct. 49, Sec. 2, Par. 17.) This removes from the jurisdiction of the Commission some 350 to 400 independent telephone companies. With the exception of farmer cooperative lines, these companies are found in small villages. They having working agreements with the New York telephone companies as to tolls and long distance service. Many of them are in very pros-

perous condition. In the case of complaints, the Commission has no power to interfere nor has it any means of determining when the property values of these companies exceed $10,000. It is believed that the farmer cooperative lines should be left unregulated as they do not operate for profit.

In accordance with the unchallenged testimony taken by the Commission, we recommend that these companies which operate for profit should be subjected to Commission supervision. This can be done by striking from Par. 17, Sec. 2, Ct. 49, the clause exempting telephone companies of less than $10,000 property value which operate for profit.

GRADE CROSSING ELIMINATION

We recommend that no change be made in the present distribution of functions between the Department of Public Works and the Public Service Commission.

We have given careful consideration to the testimony presented to us and the data prepared by our research staff relative to the proposal to transfer most of the present functions of the Public Service Commission with respect to grade crossing elimination work to the Department of Public Works. This proposal was based upon the claim that duplication of engineering work exists in the present procedure and that a considerable saving in time and money would result from such a transfer.

Our conclusion, based upon this consideration, has been that there is no substantial duplication of engineering work; that the proposed transfer would result in throwing a greater number of grade crossing controversies into the courts with the result that there would be a saving of neither time nor money; that the real difficulty responsible for this proposal appears to be lack of complete cooperation between the Department of Public Works and the Public Service Commission, and that the correct solution of this difficulty is to obtain better cooperation, without making any changes in the present distribution of functions between the Department of Public Works and the Public Service Commission.

A number of detailed suggestions for the improvement of the various acts relating to grade crossing elimination were made to us by the Public Service Commission and the Transit Commission as referred to at some length in the report of our counsel. (Counsel's Report, pp. 170–174.) Many of these proposals have already been introduced into the Legislature, and serious consideration should be given them. Particular attention is directed to the suggestions numbered 2, 11, 12, 14 and 15.

RURAL ELECTRIFICATION

We recommend that a divisional head be appointed in the Public Service Commission to be responsible for stimulating a plan of area development of rural electrification and hold hearings in connection with proposed measures; that funds be granted this division for subsidizing research on area developments, line problems, methods of financing increased use of farm appliances, etc.[1]

In view of the civic and economic importance of supplying the farms of the State with electricity at a reasonable price, special attention has been devoted to the extent of rural electrification and the ways and means of bringing about a further extension of rural lines.

Beginning about 1925, there was put into effect what is known as the Adirondack plan. This plan which has been adopted in the major part of the area within the State has met with quite general approval. It was based on the proposition that the company was entitled to a fair return on the investment which it must make in order to make its line extensions into the rural territory, the return to be equal to the interest on the investment, the cost of doing business and furnishing the kilowatt hours consumed. It included an amount for retirement of the plant, maintenance, taxes and the costs of the kilowatt hours furnished.

The cost to the consumer may be split in three parts, indicated as follows:

A. A minimum charge for consumers:
   1. If there be only one consumer per mile the minimum charge would ordinarily be $24 per month. As the number of consumers per mile increased, the minimum charge is proportionately reduced.
   2. An energy rate for the kilowatt hours actually used. If the energy charge does not equal the minimum charge, the minimum charge must be paid. If it exceeds it, the energy charge is paid.

B. A counted room or floor space charge.

C. A customer charge.

As the lines are developed, it is usually found that the minimum monthly bill ceases to be a factor and that the customer will use more than the minimum monthly charge.

The plan has been in operation for five years, 1925–1929, while the period for which comparable statistics are available is 1926–1929. The table below gives a summary of the growth of electrified farms from 1926 to 1929 and the national average for the years 1927 to 1929. On January 1, 1925, the number of farms in New York with central station service was 30,800. If the increase in rural electrification for the year 1925 was uniform with the later

1. A careful analysis of this matter will be found on pages 195 to 204 of Counsel's Report.

period, then approximately 25,000 farms had service previously to the installation of the Adirondack Plan.

Year	Total No. of Farms	With Central Station Service in N. Y.[1]	Per-cent	Additional Farms Within a Mile of Line	Central Station Service in U. S.[2]	Per-cent[3]
Jan. 1, 1926.....	188,754	30,800	16	36,000	.....	...
Jan. 1, 1927.....	.....	35,600	18.5	.....	325,000	6.5
Jan. 1, 1928.....	.....	42,000	22	.....	.....	...
Jan. 1, 1929.....	.....	47,800	25	56,000	500,000	9.9
Jan. 1, 1930.....	.....	50,060	28	.....	.....	...

[1] Material from letter of C. H. B. Chapin, Secretary Empire State Gas and Electric Association.

[2] Committee on the Relation of Electricity to Agriculture, 1929 Report.

[3] From 1927 to 1929 the percentage increase in New York was 35.2% and for the United States 53.8%.

The increase in the number of farms with central station service in New York from 1927 to 1929 was 12,200, or 34.2%, while the national increase was 175,000 farms, or 53.8%. Although New York failed to keep pace with the national average, it must be pointed out in all fairness that New York stands second to California in the number of farms electrified. Contributing factors to this difference are that California has had the advantage of the irrigation load while in New York farm abandonment has gone on rapidly since the census of 1920. Thus, the New York curve is beginning to flatten out and percentage increases will not reveal the true picture. The increase of the future will be slower because the most accessible farms are now electrified.

At present, in 85% of the area of the state, rates have been filed or are in the process of filing for the operation of the Adirondack Plan, or some adaptation of that plan.

It appears, however, that line extensions should be made in farming areas according to a more comprehensive program under this plan than has as yet been generally adopted. This leads to a consideration of what was called the area development, as opposed to the single line development. It is believed that if plan were made for line extensions on an area basis, installations would be cheapened and more rapid extension into the strictly farm regions would be stimulated.

There is submitted herewith the testimony taken before your Commission, including numerous exhibits, data and reports on special subjects.

The report is respectfully submitted to your honorable bodies with confidence that it will receive the careful and deliberate consideration to which the importance of the subject discussed entitles it.

JOHN KNIGHT, *Chairman*
HORACE M. STONE, *Vice-Chairman*
JOSEPH A. McGINNIES
WARREN T. THAYER
RUSSELL G. DUNMORE
WILLIAM J. HICKEY

February 28, 1930

MINORITY REPORT OF COMMISSIONERS

FRANK P. WALSH
JAMES C. BONBRIGHT
DAVID C. ADIE

[51]

FEBRUARY 28, 1930

To the Legislature of the State of New York:

We, the undersigned, members of your Commission on Revision of the Public Service Commissions Law, have the honor to present herewith the following special report:

With many of the comments and recommendations of the majority report we heartily agree. Our convictions, however, are none the less strong that, neither in its analysis of the economic issues involved nor in its specific program for revision of the law does it go to the heart of the problem.

Months of almost undivided attention given to a study of the evidence presented at our hearings have brought to us the firm conviction that truly effective regulations will be impossible as long as there prevails in this State the rule that the so-called "value of the property," as determined by the courts, shall be the basis of rate control. As long as this rule persists, no amount of administrative reform, no enlargement of the Commission's staff, no enhancement of its statutory powers, can do more than palliate the present evil. We seriously question, indeed, whether all these proposed improvements in the mere *machinery* of regulation will not add to rather than detract from the present evil. For if they *really work*—if they succeed in putting into complete effect a vicious standard of rate control which is fortunately only half-enforced at the present time, they will only result in making a bad situation worse.

It is because of our conviction that regulation can never be made effective under the "fair value" standard that we have presented to your Commission, as we now present in our report, a bill adopting a completely new basis of rate control, based on the principle of "prudent investment" but modified in such a way as to give fair and liberal treatment to existing investors who have contributed their funds under a different rule of law. We believe that this plan is in the interest, not merely of the public but also of the investors (though not the speculators) in public utility securities. It is a radical bill only in the sense that it accepts a radical departure from the prevailing system of regulation; but it is a conservative bill in that it offers to the investors in public utility properties a far greater security against loss than they possess under the now prevailing system.

The majority members of the Commission, for reasons that seem to them conclusive, have not seen fit to support the type of program that we propose. Although, for reasons stated at length in our report, we believe that their objections are not persuasive, we should have been glad to consider any alternative program by which the fundamental evil of the "present value" doctrine of rate making might be removed. No such proposal, however, has been forthcoming. While recognizing, in language however cau-

tious, that valuation, under review by the courts has been the great obstacle to effective regulation, the report of counsel and the report of the majority would still persist in accepting the valuation principle in the future. Their only suggestion looking toward a departure from this principle is contained in their proposal for voluntary, five or ten year contracts between the State and the utility companies under which the companies may agree, in their own self-interest, to waive their "constitutional rights" and to accept a definite rate base for the period covered by the agreement.

The contracts which are so hopefully presented as a real solution of the difficulty, would apparently adopt, for brief, recurrent periods, the very type of rate control which we here propose as a system to be applied to all companies. But being wholly optional, they would have to be negotiated on the utilities' own terms, and they would, of course, be rejected unless they gave promise of yielding to the companies at least as high profits as could be secured under the prevailing "law of the land." All efforts to "coerce" the utilities are to be sedulously avoided; but the utilities themselves would be armed with a new coercive weapon against the public, in that they would now possess the alternative of accepting whichever system of rate control would promise them the higher pecuniary return. Moreover, at the end of each ten-year period the whole process of negotiations would be gone through again, each time on the basis of whatever new valuations the utility companies might be able to support under the then existing "law of the land."

If public opinion is not yet ripe for fundamental action by the Legislature, we should much prefer to leave matters as they stand today, rather than to buy temporary peace by the "jury-rudder" device of voluntary short term contracts which would only postpone the day of reckoning.

The failure of the majority report to suggest a really effective escape from the hopeless principle of rate making by recurrent valuations would seem to us to make all the more essential a policy, which we have proposed in our present report, by which municipalities and local districts may seek relief from unjust rates and inadequate service through the weapon of public ownership. The mild threats contained in counsel's report, that the utility companies may expect government ownership in the indefinite future if they do not hereafter adopt a more conciliatory attitude toward the public, will surely not create the "moral pressure" which their author hopes to use in place of what he calls "coercive" action.

The most insistent objection that has so far been raised to the new basis of rate control proposed in our report, is the objection that it is unconstitutional under the rulings of the Supreme Court of the United States. As this problem is discussed at length in our report, we need not restate our reasons for thinking otherwise. We cannot refrain, however, from calling attention to the fact that almost every fundamental change in our State and Federal Laws affecting property rights, almost every legislative action to

make the "law of the land" keep pace with the changing economic conditions, must run the gauntlet of constitutionality.

The Federal Transportation Act, the State Workmen's Compensation Laws, the New York Rent Laws, the laws protecting women and minors against excessive hours of labor, the City Zoning Laws, these and other great accomplishments in the direction of legislative reform have had to overcome the objections of their opponents and even the fears of their friends that the Supreme Court would hold them unconstitutional.

If the Legislature of this and other states, or the Congress of the United States were to listen to such counsel of timidity, legislation would become a static thing, and the Constitution of the United States, instead of adapting itself to the rapidly changing economic and social conditions of the nation, would degenerate into a set of nineteenth century formulas based on the legal dicta of judges whose decisions grow out of economic circumstances that no longer prevail.

The first part of this report,* dealing with the general problems involved and discussing the effectiveness of existing regulation, was prepared by Commissioner Walsh, and its conclusions and recommendations are concurred in by Commissioners Bonbright and Adie. The second part of the report, dealing with technical problems of valuation and rate control, was prepared by Commissioner Bonbright, and its conclusions and recommendations are concurred in by Commissioners Walsh and Adie. The third part of the report, consisting of a proposed amendment to the Public Service Commissions Law, was prepared by Commissioner Bonbright in conjunction with Dr. John Bauer and other legal and economic experts. It embodies some, though not all, of our legislative recommendations and has the endorsement of all of the undersigned members of the Commission.

Respectfully submitted,

FRANK P. WALSH
JAMES C. BONBRIGHT
DAVID C. ADIE

* For Recommendations of Commissioners Walsh, Bonbright and Adie, see page 241.

REPORT SUBMITTED BY WILLIAM J. DONOVAN, COUNSEL

RESEARCH STAFF

WILLIAM E. MOSHER, *Director*
FINLA G. CRAWFORD
CHARLES S. HYNEMAN
RALPH HIMSTEAD
HELEN B. BREESE
PAUL V. BETTERS
} School of Citizenship and Public Affairs, Syracuse University

MAURICE R. SCHARFF, Consulting Engineer, Pittsburgh
JOHN BAUER, Economist, New York
E. K. REDFERN, Accountant, Pittsburgh

ROBERT H. THAYER
O. C. DOERING, JR.
PAUL KIRBY HENNESSY
} *Assistant Counsel*

REPORT SUBMITTED BY WILLIAM J. DONOVAN, COUNSEL

Letter of Transmittal.

Part I:

Report on Revision of Public Service Commissions Law.

Part II:

Statistics of Hearings Before the Commission on Revision of Public Service Commission Law.
Personnel and Administration of the Public Service Commission of the State of New York.
Commission's Staff and Appropriations.
Valuation, Rate of Return and Regulation of Rates.
Reparations.
Submetering.
Accounting Control.
Security Authorizations.
Reorganizations, Mergers, Transfers of Franchises or Property and Acquisitions of Stock.
Control of Holding Companies and Transactions Between Affiliated Corporations.
Interstate Transmission.
Judicial Review.
Municipalities and Their Relations to the Public Service Commission.
Grade Crossing Elimination.
Regulation of Motor Carriers.
Control of Private Water Companies.
Telephone Companies Below $10,000 Property Value.
Rural Electrification.

Part III:

Suggested Amendments by the Public Service Commission to the Legislature Not Included in Other Sections of This Report.

FEBRUARY 23, 1930

HON. JOHN KNIGHT,
Chairman of Commission on Revision of Public Service Commissions Law,
Room 335, Capitol,
Albany, N. Y.

DEAR SENATOR KNIGHT:

In accordance with the formal instructions of your Commission I have prepared under appropriate headings an analysis of the testimony taken during the public hearings of your Commission, and of the material presented by the Research Staff and also an introductory statement of the principles upon which this analysis is based.

Since it is solely the function of the Commission to make its recommendation to the legislature I have not undertaken to pre-

pare definite amendments although I have tried to indicate the various suggestions which should engage the attention of the Commission.

In submitting this report I desire to bring to the attention of the Commission the very valuable services rendered this inquiry by the Research Staff under the direction of Dr. William E. Mosher, Director of the School of Citizenship and Public Affairs of Syracuse University. Under this fine, intelligent and able direction this group of technicians and experts made possible an investigation that was not only impartial but comprehensive. I am particularly indebted to Dr. Mosher for his generous cooperation in developing and analyzing the various economic theories submitted and his broadminded and practical conception of what was best in the public interest. The services of Dr. Mosher and his staff warrant the recommendation that in similar investigations advantage be taken of the aid of such technical and scientific bodies.

I desire also to acknowledge my obligation to my associates, Robert H. Thayer, O. C. Doering, Jr., and Paul Kirby Hennessy not only for their aid in legal research but for their patient, conscientious and competent attention to the many detailed and various tasks involved in preparing and submitting the evidence at the hearings and in compiling and analyzing the testimony for this report.

Very truly yours,

(Signed) WILLIAM J. DONOVAN

PART I

REPORT ON REVISION OF PUBLIC SERVICE COMMISSIONS LAW

The designation of this Commission is recognition of the fact that there is something wrong with utility regulation in this State. Opinions differ as to what is wrong. There are those who assert that regulation has failed to protect the consuming public and that it is impossible to make it effective. Others contend that during the period of its existence the Public Service Commission has marked a vast improvement over the days of local control, and that what is needed is power and resources from the legislature that will be commensurate with its new duties and responsibilities.

The task of this Commission is to determine whether or not there are serious shortcomings in regulation. That being ascertained it is then necessary to find the source of the shortcomings, whether (1) in the inadequacies of legislation or (2) in the administrative methods of the Public Service Commission.

In its study the Commission has undertaken to consider the principles upon which regulation is based. While the propriety of governmental regulation of public utilities has long been recognized, the prevailing methods of control as well as the basis of control have changed with social and economic conditions. Wisconsin was the first state to adopt a more systematic and expert regulation of its rapidly growing utilities and to assign this task to an especially appointed Commission in 1907. In the same year New York followed, and at the present time forty-seven states have adopted one or another type of commission regulation. Court decisions and practical experience have demonstrated the lines of supervision within which regulation can be exercised.

It is conceded that under commission regulation there has been improvement of conditions in public utilities, over what they were twenty-five years ago. But the problem of regulation today is different from what it was when the Public Service Commission Law was first enacted. The questions are more complex than the present law was designed to solve. To be effective the regulating body must be equipped to keep abreast of changing conditions. Proof that commissions are lagging behind in the control of modern utilities is found in the fact that in no State of the Union has a utility commission adequate authority to deal with holding companies, and yet the bulk of the power industry is dominated by a system of such companies. It is asserted that present regulation fails to adequately serve the consuming public. The question to be determined is whether or not it can be made to do so, whether in the modern complex financial and industrial structure with resultant abuses regulation can be made effective. Regulation then is necessarily an experiment. Before it can be decided that it cannot work we must be certain that adequate provision has been made to give it a fair chance.

The determination of this difficult question is not found in loose generalizations, nor in hasty conclusions drawn from an imperfect conception of the facts. Any decision must be founded upon a careful survey of the situation and a consideration of every element of opinion. This your Commission has tried to do. It has endeavored to appraise all of the factors entering into the problem, and to obtain the best opinion as an aid in solving it.

At the outset of the investigation you gave unanimous approval to a program submitted by counsel which called for an inquiry that would be impartial, objective and scientific. This policy was scrupulously followed throughout the entire proceeding. Now, when we come to an analysis of the testimony and to an interpretation of the facts with a view of translating into action the lessons drawn from this investigation, I have tried to keep in mind the same principle. It is in the light of that principle that the following analysis of the testimony must be viewed.

The record of these proceedings substantiate the impression generally held that not only has a greater strain been put upon the Public Service Commission by reason of the increasing complexity of utility development, but also that with this development have come actual and threatened abuses for the correction or prevention of which the Commission is not equipped or authorized by law to deal.

For example, it requires no careful reading of the testimony to see the administrative weaknesses and difficulties in the existing scheme of rate control. There is great misunderstanding as to the powers of the legislature in itself fixing the rates or in granting its authority to commissions. The powers of the State are limited by the Federal Constitution as that instrument is interpreted by the Supreme Court. The State regulatory body is bound by those decisions. Neither the State Commission nor the State courts nor the Legislature itself has any power to alter a right conferred by the Constitution, nor can the corporations be compelled or coerced to waive such a right. And in deciding to adopt a particular economic doctrine, it is essential that the limitation imposed by the Constitution be borne in mind.

A rate base may be defined as the fair value of the property of a utility company upon which it is entitled to earn a reasonable return. One of the serious problems yet unsolved by the Public Service Commission of this State in common with those of other States, even under the existing law is the policy of determining value for rate-making purposes. Rate determination is largely a matter of guess work. In some cases experienced guess work, but guess work nevertheless. Only in an actual rate case are definite and reliable figures available. The testimony of members of the Commission and the Exhibits submitted disclosed how inadequate were the figures relied upon by the Commission in determining a fair rate of return and how uncertain was the determination of a given rate reduction. The reasonableness or unreasonableness of rates can never be accurately ascertained unless there is a definite

rate base for every utility in the State. Whatever the cost in time and money it is recognized that rate making must become a more precise calculation. This cannot be accomplished without obtaining appraisals of all the existing public utility companies in the State.

This entire question is made more difficult and constitutes a source of public rancor and resentment by the tortuous and lengthy legal course any valuation case may and often does take before final decision. Further confusion is found in the right of the utilities, which they not infrequently exercise upon receiving an adverse decision by the Commission, to proceed at once in the Federal Court. Strangely enough, the very utilities that urge that State regulation is effective and that it is not necessary to have Federal control of their activities, are among those who refuse to pursue their relief in the State Courts. In effect, such a practice makes the presentation before the Commission a mere formality which nevertheless involves great expenditure of time and money. The real test comes in the Federal Court. And that court with its congested dockets, with the necessity of a new record before a master, possibly unfamiliar with the technical questions of rate cases, presents the seemingly anomalous situation of bringing the Commission before it as a defendant, forced to justify in a protracted trial the rates that it was created by the State itself to administer. The mere statement of these facts is sufficient to stress the need of some correction to the present inefficient and wasteful duplication of effort in obtaining a decision in such cases.

Under simple rules of comity that should exist between the Federal Government and a sovereign state, it would seem that there should be no intervention before the highest court in the State had passed upon the question and appeal could then be had to Supreme Court of the United States.

The question of holding companies presents another difficult problem. It must be recognized that these companies have been of great service in the financing and developing of operating utilities. They have improved the financial standing of local companies so that money may be procured at lower rates. In that respect they have conferred real benefits upon the public. Without them it might well be that we would be denied certain advantages, particularly in electric service. However, the opportunity and temptation for a holding company, under the system of management contracts, particularly contracts for service and supervision between the holding company and a subsidiary operating company, to charge a large fee and thereby increase its earnings at the expense of the operating company and ultimately the consumer, constitutes a challenge to more effective control.

During its investigation, the Commission sought to develop the ramifications of such management contracts in the State of New York. In that study it dealt with each of the large units undertaking to serve power to the people in this State. It found through information furnished by the company itself that the Buffalo, Niagara & Eastern under an arrangement which provided for the

payment to it of 5 per cent of the gross income of its operating companies, had made a profit of $500,000 in 1928 above all of its actual expenses, including Federal taxes and holding company expense. This was the only management contract within the companies now comprising the Niagara Hudson group, and Mr. Carlisle, Chairman of the Board of Directors of that group, testified that this contract was abrogated before the subsidiaries were taken over by his company and that such contracts were discountenanced by him and his company.

It was found that construction contracts with favored contractors had existed within the Consolidated Gas group and that, in some instances, officers and directors of this organization were performing either individually or through companies which they controlled, engineering and similar services for the Consolidated Gas Company. Mr. Sloan stated that the present policy was to abrogate all such contracts and to have the services performed by the companies themselves, and in addition that he did not permit any officer or employee or director of any company within his jurisdiction to do construction work for any of the companies of which he was President.

The E. L. Phillips Company through various understandings, which are termed engineering contracts, in actual effect exercise managerial control over the Long Island Lighting Company and its subsidiaries. A similar situation prevails with the Rockland County Lighting Company which through contracts and intercorporate relations with the Charles H. Tenney Company, a New Hampshire corporation with offices in Boston, is able to control substantially every policy of the company under a definitely fixed service charge.

The most interesting illustration of the complex intercorporate relations and transactions under present conditions is encountered in the Associated Gas and Electric Company group. I do not intend to characterize the attitude of the representative of that group, Mr. H. C. Hopson, Vice-President and Treasurer, who testified before the Commission. It is sufficient to say that he did not choose to cooperate as did the executives of other utility groups in the ascertainment of the facts bearing upon this investigation. From his testimony, however, and the data that he afterwards submitted, it appears that there are some 300 to 400 corporations in the Associated group. Thirteen of these are operating gas, electric, water and telephone companies in New York State. These are controlled by four holding companies which in turn are controlled by Associated Gas & Electric Company. Substantially all of the voting stock of the operating companies is owned by their respective holding companies, and substantially all of the stock of such holding companies is owned directly or indirectly by Associated Gas & Electric Company.

According to the testimony out of total of 6,109,297 shares of stock issued and/or to be issued May 31, 1929 (8,040,489 shares November 30, 1929) the only stock which possessed unrestricted voting rights is the so-called Class B stock which consisted of 300,000 shares. It appeared that all of this stock was held by Associated Securities Corporation, over 51 per cent of the stock of which was held by H. C. Hopson and J. I. Mange so that these two men were able through their control of voting stock to dominate not only the holding and service companies but every operating company in this system. By means of a series of contracts, it appears that during the year 1929 the operating companies of this system in New York State paid $1,260,526.66 for management, construction and purchasing services. No details were made available as to how much of this sum represented cost to the service agencies or as to how much represented clear profit through them to the holding company. The statement of the working of these companies illustrates the need of subjecting such management contracts to the supervision of the Public Service Commission and the need of the Commission having access to the books of holding or managing companies so that the reasonableness of such contracts may be determined.

More detailed reference has been made in this introduction to the questions of rate regulation, judicial review and holding companies because they are the primary questions with which you are concerned. As will more fully appear in subsequent discussion, other major problems were considered. They had to do with the regulation of the newest of the utilities, the motor-carriers, as well as the oldest, the private water companies. Consideration was given also to the current procedure of the Public Service Commission with reference to its handling of rate cases, and also its practices in dealing with consolidations and mergers, accounting, auditing and reporting. Careful attention was given to the testimony of members of the Commission bearing upon the administration of the law and constructive suggestion was sought from experts as to improved methods of administration.

It may then fairly be said that in the course of an inquiry that actually occupied several months, careful attention was given to the definition of the issues presented. The questions now for this Commission to determine are: (1) In what spirit these problems should be approached; (2) how the problems themselves may best be met.

The spirit of approach is of the utmost importance. If it be assumed that the public utilities are seeking to destroy regulation and will submit only to the forces of coercion and compulsion, then the Public Service Commission must be regarded as a kind of police agency. If on the contrary it is believed that the interests of the utilities and of the State are not in conflict, but that in the long run the interests of one are consistent with the interests of the other, that the utilities enjoy certain valuable benefits from the public and are therefore carrying out their function under charter of a trusteeship, the action of both the Legislature and the Commission would take on an entirely different character. In my

judgment the proper approach is dictated by the latter conception. The analysis of the testimony and the suggestions therein contained are based upon that philosophy.

There is a reciprocal obligation on the part of the utilities and of the State. The public utility companies today are spending many thousands of dollars for advertising and other publicity in order to inculcate in the minds of the public a spirit of friendly cooperation that should characterize the relation between the public and the utilities. Yet all this publicity cannot eliminate the suspicion and hostility felt by the public when these utilities instead of looking upon their franchises as imposing an obligation, seek to exploit their privileges against the interest of the public which in the first instance granted these privileges.

On its part the State must remove from the minds of the utilities the fear that they will be denied a fair return and will be unable to obtain money for necessary improvements and the rendering of service to the public.

But a proper relationship can only come from an established basis of mutual confidence. Leaders of utilities must look upon themselves as economic servants of the public, as the State officials are the political servants of the public. If this is only an Utopian idea, then in my judgment regulation is impossible. The alternative is not coercion, because that can only bring resort to the courts with resultant resentment and bitterness. The only feasible alternative is public ownership with whatever its attendant evils may prove to be. Before the issue is decided between the two, however, sound policy dictates that it should be determined whether or not by revision of the statute and by suggested improvements in administration, regulation can be made reasonably effective.

That being the spirit of approach to the problem, we now come to specific suggestions as to how certain of these problems may best be met.

Valuations and Rate-Making

It has been proposed that there should be established a system of rate-making on the basis of a definite and objective standard by which to measure the return to public utility investors. Such a suggestion has been embodied in a bill which has been submitted for the consideration of this Commission. This bill with certain modification is in essence the so-called Bauer plan that was discussed by the various economists and commissioners who testified before your body. In its essence this plan calls for an initial valuation of the property of every utility as of the date of the adoption of the act. This valuation would include every element of property appraised according to the law of the land. When once fixed, the initial valuations should not be subject to any revision in the future, either because of higher or lower prices, varying cost of construction or other conditions.

According to the plan, subsequent investments would be added to the former valuation on the basis of actual and reasonable costs

of new properties. The sum total of the valuation for existing property plus the amounts invested subsequently would constitute the rate base. After the valuations on present property are fixed future determinations of rate bases would become a matter of accounting procedure.

Objection has been made to such a method because it is (1) uneconomic and (2) unconstitutional.

Those who attacked it as uneconomic stated that the present investors in the common stock of the utilities had invested their money with the anticipation that the purchasing power of the dividends received would be maintained as it has been in the past, and as it might not be in the case of a permanently fixed valuation. Not only would this work an injustice against the stockholders but, in the case of a marked fall in prices, it might result in an inordinately high return and consequently work injustice to the consumer. On the other hand, if prices should vary drastically upwards it might seriously hamper the companies in their ability to pay adequate dividends and also in their attempt to raise new funds for needed expansion, unless securities were sold at disproportionately high rates of interest. It was further pointed out that during and shortly after the war a number of companies experienced this handicap because of the tardiness with which commissions adjusted the base values and the returns thereon to the companies. In some instances it was said that deterioration of service resulted because of the financial handicaps under which the utilities were laboring. It was urged that as long as we live in a world where prices fluctuate—and over a 25-year period there have been marked fluctuations in prices,—some provision must be made for the adjustment of base values, and that an attempt to inexorably set values once and for all, runs counter to social justice and economic reality.

The question of constitutionality was frequently raised in the discussion of the Bauer plan. On this point it was urged by the proponents that if the underlying economic theory were embodied in the statute and presented to the Supreme Court as being in the public interest, the court would be confronted with a problem that had never before been raised and one upon which previous decisions would have no bearing. In response to this, those who disapprove of the plan have urged (1) that the policy of prudent investment is involved and that the courts have had ample opportunity to consider the whole gamut of arguments in its favor, and (2) that the state could not, by legislative fiat deprive a utility of a reasonable return upon the fair value of its property determined as of the time of the inquiry.

It has been pointed out further that the Bauer plan would be invalid on the ground that the State could not *indefinitely* suspend its sovereign right to regulate rates, as is contemplated in the "freezing" of the base value of existing properties.

A further argument advanced by those urging the plan is that, even though there may be doubt as to its constitutionality, the

Legislature would be justified in passing the proposed statute as a protest against what they consider the unsound economic doctrine of the Supreme Court on the question of valuation. They assert that the Supreme Court could not in the long run withstand public opinion if organized and persistent. It has even been proposed that coercive measures be invoked in order to compel the utilities to adopt the suggested method of fixing values. Overlooking the likelihood that such measures themselves would be held to be unconstitutional, it cannot be disputed that the adoption of coercive measures of whatever sort would precipitate a conflict with the utilities that would ultimately prove to be injurious to all concerned.

Those who deplore such a conflict and yet who think it necessary to effect a sounder and more workable method of valuation have suggested an alternative plan, designed to avoid the objections discussed above, while accomplishing similar results. This suggestion proposes that the Commission shall be authorized by statute to negotiate voluntary agreements with utility companies, to run for not more than 10 to 15 years, defining an improved method of rate regulation through accounting control. Such authority would be accompanied by a statement of legislative policy as to the factors to be taken into account in fixing the initial valuation of existing property and the rate of return thereon, and as to the treatment of property additions and retirements, depreciation accounting and reserves, return on additional capital invested and the adjustment of rates during the period of the contract.

In order to have an accurate means of calculation, it should be provided by statute that every utility in the State should have an actual physical appraisal in accordance with the law of the land.

The following suggestion has been made as to the policy which should be followed by the Commission in its negotiations.

The Commission should consider primarily the establishment of a return on the capital actually contributed by investors which would be sufficient to attract fresh capital to the enterprise, and in so doing the Commission should give careful study to the entire financial structure of the company and to the question whether or not the company has been efficiently managed and operated. Attempt should be made to reward efficiency and thereby to provide incentive for progressive and economical management.

This policy should embody the following considerations: (1) Original cost of construction; (2) cost of reproduction new less depreciation; (3) the estimated prospective earning capacity of the property at the proposed rate of return; (4) the necessity of making reservation out of income for surplus and contingencies; (5) all facts, which in the judgment of the Commission, have any bearing upon a proper determination of the question.

The utilities should be free to enter into the agreement or not as they should determine. The statute should not be mandatory.

Such agreements would be entered into by the Commission only after public hearings at which investors and consumers would be present and would be effective only after filing with the Legislature, with opportunity for the Legislature to pass upon them if desired.

Those who endorse this plan assert that it would accomplish the result of a stable, workable system of regulation for a period of time sufficient to give it an adequate trial; that it would avoid the economic and constitutional objections to the Bauer plan in that agreements would be voluntary and that neither the company nor the State would be permanently deprived of constitutional rights and powers; that the public interest would be adequately protected through public hearings at which legal representatives of the public could properly present the public viewpoint with the aid of the technical staff of the Commission; that it would be of benefit to the utilities because it would enable them to take as definite and certain a rate base which under the present system needs to be constantly revised and that for the sake of this certainty they would be willing for a reasonable time to waive their rights under the decisions of the court.

Judicial Review

The record of this Commission indicates that the administration of rates by the State Commission has been complicated by the fact that the utilities upon the issuance of an adverse order by the Commission have at once instituted proceedings in the lower Federal court with resultant expense and delay. The entire subject is more fully developed under the heading of Judicial Review.

An analysis of existing legislation and court decisions suggests that the real remedy for the present situation lies in congressional action. However, suggestions have been advanced toward the setting up of judicial machinery for the determination of rate cases by the State courts in the first instance.

An opportunity for the State courts to obtain jurisdiction exclusive of the jurisdiction of the Federal courts is afforded by section 266 of the United States Judicial Code, which permits action in a State court to take precedence over an interlocutory injunction in a Federal court under certain conditions. Further State legislation, however, is necessary to obtain the full advantages of the opportunity thus offered. It has been suggested that legislation be adopted providing that whenever a suit for an interlocutory injunction shall have been begun in a Federal District Court to restrain an order of the Commission, the Commission may bring a suit to enforce its order in the Appellate Division or some statutory judicial body at any time before the hearing on the application for an interlocutory injunction. The statute should provide for a mandatory stay of the enforcement of the Commission order pending the determination of the suit in the Appellate Division, and should contain appropriate provision for the sending of a notice to the Federal District Court in which action was originally begun, for giving preference to the action in the Appellate Division, and for appeal to the Court of Appeals.

It has been suggested also that the Legislature provide that the Commission upon the completion of hearings in a rate case shall issue no enforcible order but shall make certain findings which shall be submitted to the utility for its acceptance or rejection. If rejected the Commission shall bring an action in the Appellate Division or in a statutory court (hereinafter discussed) for a determination of these findings, and no enforcible order shall be issued by the Commission until the Appellate Division or other statutory court has judicially determined the matter.

These plans purpose to give to the complaining party a complete and effective judicial review of the law and the facts, and quick access to the Supreme Court of the United States. Due to the decisions of the Supreme Court, objections to these plans have been advanced. These objections are fully set forth in the body of the report. Those who urge their adoption, however, believe that reasons of comity will induce the Federal courts to permit State tribunals to determine matters of local importance, leaving final determination in the hands of the Supreme Court of the United States.

Holding Companies

I have already referred to the serious questions for regulating commissions created by transactions between holding companies and their affiliated service agencies on the one hand, and their subsidiary utility companies on the other. These questions arise form the difficulty or impossibbility of defining and evaluating services with precision, and from the wide range within which accounting for such transactions may be varied when the officers responsible for contractual relations and their interpretation have common interests in the transaction. In such circumstances, the accounts of the operating company alone may become meaningless for regulatory purposes.

Many students of the subject have come to believe that regulation cannot succeed unless these difficulties are overcome. The principal suggestions made to this end have been that all management contracts should be submitted to and approved by the Public Service Commission; that the Commission should have access to the accounts and records of every company having transactions with an operating company and in a position to influence the operating company through ownership of any substantial interest in it, or otherwise; that the Commission should have complete regulatory control of every company actually dominating or operating a public utility corporation through stock ownership, contract or otherwise; and that the Commission should have power to require the complete disclosure of the identity and interest of every person owning any substantial interest in the voting stock of a public utility corporation and of their relationship in order that such influence and/or domination may be discovered.

The question has also arisen concerning the regulation of the security issues of holding companies controlling operating utilities. It has been urged that if the holding company is over-capitalized or encumbered with undesirable types of security issues, if the accounts are calculated to mislead investors rather than to inform them, or if the financial policy of the management is to make use of the control of the operating company in order to wring from them the maximum profits in a short run rather than to build up the properties in the long run, that if, in short these evils attach to the structure or management of the holding company it is a foregone conclusion that the interest of the public must ultimately suffer, because public utility credit will suffer.

There is probably great force in the argument that a Public Service Commission, solely by virtue of its power to restrict operating companies to a reasonable return on the value of their property, cannot by this means deal with the abuses of holding companies. The only question is, should control of the accounts and security issues of holding companies be vested in a commission whose duty it is to deal with operating companies? Those companies that are actually controlling the operating policy of the utility companies should be subject to complete control, but it would seem better that the control of the security issues of holding companies not falling within this category should be provided for, if at all, by some other agency than the Public Service Commission.

Rural Electrification

From evidence which was submitted by Dr. R. F. Buckmann, of the State College of Agriculture at Cornell University, it appears that the rural electrification program which has been in use since 1928 has had the effect of serving the more accessible farms. This policy has been based on the number of *users* rather than on the *use* of electricity and has failed to differentiate between farm electrification and rural electrification. Such failure necessitates a plan for area development which would extend farm electrification. This has been fully developed in the section on rural electrification.

Motor Carriers

The concensus of the opinion of witnesses on motor carriers was that they should be subject to the same type of regulation as other public utilities and that to this end a separate statute should be enacted which would cover the requirements of certificates of convenience and necessity, provide authority over rates and service conditions, and regulate the matter of local consents where two or more governmental units are involved in a bus route. It was recommended further that there should at present be no regulation of motor trucks as a public utility.

Interstate Transmission

Changed economic conditions have destroyed State lines so far as transmission of electricity is concerned. In order to deal with

this new situation, it is necessary that complete information be secured as to the extent of the problem and the best methods of solving it. It is suggested that a temporary commission be established to survey the needs of the State and to enter into conference with agencies from neighboring states looking forward to the solution of these problems.

The Public Service Commission

Whatever plan of regulation is adopted the operation of the plan finally rests upon the individuals who constitute the body set up to administer it. In considering the question of the personnel of the Public Service Commission, the suggestion was made as to the desirability of amending the law with respect to the qualifications of the appointees. The work calls for such a variety of qualifications ranging from engineering to law and administrative experience that it is conceded by all those who testified on the subject that definite specifications are difficult to enumerate and general qualifications are likely to have little force. The qualifications of members of the Commission must rest finally on the judgment of the Governor. As the executive officer of the State he cannot escape the responsibility of choosing men of breadth of vision, of independence and of fearless intelligence in meeting the duties of their office.

A great deal of testimony was had bearing upon the personnel of the present Commission. While frank criticism was made there was no charge of corruption and no attack upon the character or integrity of its members. It was asserted that certain members of the Commission were what was described as "utility minded". The conduct of hearings particularly in the Consolidated Gas case was instanced as proof of this attitude. It is impossible within the limits of this report to comment on the criticism of the representatives of the Community Councils and other witnesses.

However, in attempting to judge the desirability of certain amendments it is necessary to discuss particular administrative methods of the Commission.

The Commission in New York State has a task greater than that of any other State. Its current budget approaches $1,000,000; its staff numbers 268; and it has authorized the issuance of over two billion dollars worth of new securities during the past eight or nine years. In the period of 1921 to 1928, the annual average of formal complaints was about 11,000 while the formal proceedings averaged 900 each year. There were prepared for this Commission under the direction of Col. Blakeslee, Counsel for the Public Service Commission, over 100 Exhibits, which give a complete account of the working of the New York Commission for the eight-year period. This is an indispensable background for an understanding of the practical operation of the Commission under the existing statutes. Several hundred letters and testimonials were submitted by the Commission, complimenting the Commission upon its work and expressing appreciation for the handling of certain specified complaints.

Under the series of questions aiming to ascertain the attitude of the Commission in its initiative and alertness to discover conditions unfavorable to the public, the answer frequently came that dissatisfaction will assert itself. That attitude is difficult to understand. It would seem that any knowledge of human nature would make clear that dissatisfaction in such matters asserts itself only when a "boiling point" has been reached. Such an attitude would indicate a misconception of the original purpose of the creation of the Public Service Commission which was to safeguard public rights and interests. That function of the Commission cannot be fully performed if the Commission itself is content to wait for formal complaint or to insist upon a technically correct pleading. It must rather be alert to discover causes of discontent.

This expressed attitude, however, may be due the so-called judicial attitude of the Commission which was subjected to so much criticism. It would seem that the original conception of the Public Service Commission was of a body that, while fact-finding, was also quasi-judicial in character. It may not be fair to say that the fault rests entirely on the individual commissioner. It may be as a number of witnesses testified that the assumption of the judicial character is inevitable by reason of the nature of the work. Certainly the fact is that the Commission has come to be generally recognized as a group of judges sitting in a case or controversy.

At the commencement of these hearings I suggested to this Commission that perhaps one reason for this situation was that one body was vested with the duty of investigator, prosecutor and judge. As a remedy I suggested the advisability of splitting the functions of the Commission so that there would be an administrative division which could handle the multitude of details, so inevitably involved in such a department, and that there be established a Court of Commerce or a Court of Utilities whose sole function would be to pass upon and decide the matters presented by the administrative body and not accepted by the utilities. This Commission might wish to explore the possibilities of this suggestion.

In considering its adoption the effect that it might have on the question of judicial review should be borne in mind. The present state process would be shortened by providing for direct review from the decision of this utility court to the Court of Appeals. Also the Commission will wish to consider the necessity of creating the office of a People's Counsel, either as a Deputy Attorney General or, if the functions of the Public Service Commission are divided, in the administrative division. His duty would be to represent more definitely the interests of complainants.

Such a counsel would be available to municipalities as well as to individual complainants and would insure that every provision had been made through his cooperation with the Commission staff to give the fullest protection to the interest of the consumer.

Because of the growing complexity of utility organization, the unsolved problems involved in rate control, accounting supervision and the like, the proposal for the establishment of a research unit as part of the Commission met with very general approval among the witnesses. Such a unit would be a most effective instrument in the hands of an alert commission in enabling it to solve what may be called long run problems.

With the revision of the Public Service Commission Law as has been indicated and by providing the Commission with an adequate staff, regulation could be given a real chance to succeed.

* * *

Following your request, this discussion has been made in order that an integrated presentation of the problems involved might serve as an aid to you in the consideration of your recommendations. It may serve also as an index to the more detailed analysis of the various questions.

It is based upon the principle that regulation can be successful only in the acceptance by both the State and the utilities of a definite standard of social justice and that in the upholding of this standard the Commission must be given every power that can be conferred by statute and shall be required to exercise every facility at its command in the protection of the public interest.

PART II

STATISTICS OF HEARINGS BEFORE THE COMMISSION ON REVISION OF PUBLIC SERVICE COMMISSION LAW

First Public Hearing	October 9, 1929
Final Public Hearing	January 15, 1930
Total number of Hearings	43
At the Bar Association, New York	28
At the City Hall, New York	12
At the City Hall, Buffalo	2
At the County Courthouse, Syracuse	1
Total Number of Witnesses	95
Public Service Commission and Staff	12
Representatives of Regulatory Bodies	11
Representatives of Municipalities and Civic Organizations	17
Representatives of the Public	16
Technical Experts and Advisers	18
Representatives of the Utilities	21
The stenographic record	5,816 pages
Number of Exhibits	205

LIST OF WITNESSES

Public Service Commission and Staff:

William A. Prendergast, Chairman.
George R. Lunn, Commissioner.
George R. Van Namee, Commissioner.
William R. Pooley, Commissioner.
Neal Brewster, Commissioner.
C. V. Vanneman, Chief Engineer.
W. J. Fitzpatrick, Chief Accountant.
Edward C. McEntee, Executive Clerk.
Francis E. Roberts, Secretary.
Ferdinand J. Enterlin, Assistant Engineer.
Michael E. Kearney, Senior Accountant.
Edward J. Cheney, former Chief of the Division of Light, Heat and Power.

Representatives of Regulatory Bodies:

William G. Fullen, Chairman of the Transit Commission.
Leon G. Godley, member of the Transit Commission.
Thomas J. Tingley, former People's Counsel of Maryland.
Henry C. Attwill, Chairman of the Massachusetts Department of Public Utilities.
Lewis Goldberg, Commissioner of the Massachusetts Department of Public Utilities.
William M. Acheson, Chief Engineer, Department of Public Works.
Howell Ellis, member of the Public Service Commission of Indiana.
Frank T. Singleton, member of the Public Service Commission of Indiana.
Harold Evans, former Public Service Commissioner of Pennsylvania.
Alvin C. Reis, Chairman of the Judicial Committee of the Assembly of the Wisconsin Legislature.
Ernest E. Cole, Deputy Commissioner, New York State Education Department.

Witnesses Representing Municipalities and Civic Organizations:

Maurice Hotchner, Counsel for Utility Consumers' League.
Nathan L. Amster, Chairman of the Manhattan Railway stockholders.
Joseph P. Milgram, Secretary of the Utility Consumers' League.
Morris L. Ernst, former Counsel for Public Committee on Power.
Parker McCollester, representing the Publisher's Association.
Daniel DeV. Harned, Chairman of the Executive Committee of the Community Councils.
Howard W. Laidler, Executive Director of the League for Industrial Democracy.
Norman Thomas, Executive Director of the League for Industrial Democracy.
F. L. Bird, Executive Secretary of Committee on Coal and Power.
William A. Morgan, Jr., Public Utilities statistician, Law Department, Buffalo.
Frank C. Perkins, President of the Council, Buffalo.
George W. Knox, Corporation Counsel, Niagara Falls.
Jeremiah J. Hurley, Assistant Corporation Counsel, Buffalo.
Fred M. Renshaw, Traffic Commissioner, Buffalo Chamber of Commerce.
Francis X. Schwab, Mayor of Buffalo.
Joseph T. McCaffrey, Corporation Counsel, Oswego.
William Wallace White, Mayor of Pelham.

Representatives of the Public:

Cornelius M. Sheehan, former Deputy Commissioner of Water Supply, Gas and Electricity.

Peter Grimm, President, Real Estate Board of New York, etc., etc.
J. C. Cushman, President, Building Managers and Owners Association, New York.
Clarence T. Coley, Operating Manager of the Equitable Building.
Henry Rafalsky, connected with Mark Rafalsky and Company, Real Estate Agents and Brokers.
Isidor Friedman, connected with construction company.
Henry L. Dlynn, Chief Engineer, Chanin Construction Company.
Lee T. Smith, Secretary of Pease and Elliman, former President of the Building Managers and Owners Association, New York.
Ralph Dudley, of H. O. Curtis Company.
Reginald Pelham Bolton, President, Electric Meter Corporation.
William D. Cameron, representing the Buss Associates, Inc.
Oliver A. Wyckoff, Bellmore, Long Island.
George S. Johnson, Bellmore, Long Island.
Frank M. Graham, Bellmore, Long Island.
Charles C. Knowles, Buffalo.
Andrew J. Hubbard, Long Island.
John Hubbard, Long Island.

Technical Experts and Advisers:

Arthur T. Hadley, President-emeritus of Yale University, Economist.
E. P. Jeffe, Engineering Representative.
Thomas L. Keaney, Certified Public Accountant.
Percival R. Moses, Engineer.
Leland Olds, Economist.
Alfred E. Forstall, Consulting Engineer.
Henry E. Riggs, Professor of Civil Engineering, University of Michigan.
Morris L. Cooke, Consulting Engineer.
John Bauer, Economist.
Irving Fisher, Professor of Economics, Yale University.
Wesley C. Mitchell, Professor of Economics, Yale University.
Percy H. Thomas, Consulting Electrical Engineer.
Lyle H. Olson, Vice-President, American Appraisal Company.
Judson C. Dickerman, Engineer.
Robert T. Livingstone, Professor at Columbia University and Consulting Engineer.
Donald R. Richberg, Lawyer.
Henry Parker Willis, Economist.
Myron T. Watkins, Professor of Economics, New York University.

Representatives of the Utilities:

J. G. Ihmsen, President, Upstate Telephone Association.
Harry E. Larsen, General Commercial Manager, Nassau County Division, Long Island Lighting Co.
Thomas F. Murphy, General Counsel, New York Water Service Corporation.

Theodore D. Pratt, General Manager, Motor Truck Association of America.

Floyd L. Carlisle, Chairman of the Board of Directors, Niagara Hudson Power Corporation.

C. W. Stocks, President, New York Motor Transportation Association.

L. H. Schultz, President of the Western New York Motor Lines, Inc.

Raymond Cornwall, Lawyer, interested in Motor Transportation business.

Leroy T. Harkness, Counsel, Jamaica Water Supply Company.

Daniel Edgar Manson, President, Rockland Light and Power Company.

Vernon M. F. Tallman, Executive Assistant, Charles H. Tenney and Company.

John A. Garvey, member of Sherman and Sterling, Counsel for the Consolidated Gas Company.

William Clark Langley, of W. C. Langley and Co., investment bankers.

E. L. Phillips, President, Long Island Lighting Company, E. L. Phillips and Co.

George B. Cortelyou, President of the Consolidated Gas Company.

Franklin H. Nickerson, Vice-President, Consolidated Gas Company.

George H. Howard, President, United Corporation.

Matthew H. Sloan, President, New York Edison Company.

Howard C. Hopson, Vice-President, Associated Gas and Electric Co.

Charles T. Russell, Counsel, New York Telephone Co.

PERSONNEL AND ADMINISTRATION OF THE PUBLIC SERVICE COMMISSION OF THE STATE OF NEW YORK

The propriety of governmental regulation of public utilities has long been established in the common law. It inheres in the police power of the State. It has been regularly exercised as a legislative rather than a judicial function of the State. The methods of control as well as the objects of control have varied as social and economic conditions have changed. The guiding principle has been that those services and commodities which vitally affect the public health and well-being are subject to regulation, particularly if they partake of the character of a monopoly.

In the history of regulation in the United States the Supreme Court decision in the *Munn* v. *Illinois* case where the right of the State to regulate grain elevators was contested, may be said to mark the beginning of the present era of public control. Although 31 years passed before the first public service commission was established in Wisconsin the legislatures of the various states continuously extended the area of regulation and experimented with

a wide variety of methods. The railroad commissions, four of which dated back to the fore part of the last century, were the most popular method of exercising partial control over the railway utilities. The efforts at control through franchises granted by municipalities should also be mentioned as forming perhaps the most colorful chapter of utility regulation. But it was left to Wisconsin to recognize the need of more systematic and expert regulation of the rapidly growing utilities and to assign this function to a specially appointed commission. This occurred in 1907. The New York Legislature quickly fell in line and others followed in rapid succession until at the present time 47 states have adopted one or another type of regulatory commission.

In view of the far-reaching importance of the issues at stake the courts have been frequently invoked to determine and define the constitutionality of the legislation under which the commissions operate, as well as of the methods and procedure which they have adopted. Court decisions have consequently played a large part in determining the scope and character of utility supervision and control on the part of the commissions. Due to these court decisions and the practical experience of a number of commissioners over a period of years it may be stated that the lines of supervision have become pretty well established.

The Present Situation

In analyzing the present situation we may well take the admirable statement contained in Governor Charles E. Hughes' message in which he urged the creation of a public service commission in New York State. This message was delivered in 1907. It resulted in the enactment of legislation along the lines of the Governor's suggestion.

The duties and obligations of the proposed commission as outlined by him may be summarized as follows:

"1. It should regulate intrastate commerce insuring impartial treatment and maintenance of service to all.

"2. It should provide regulation to insure adequate service and convenience to the public.

"3. It should act upon its own initiative as well as upon complaint.

"4. It should pass upon issues of stocks and bonds, examine property books and accounts and require detailed reports in prescribed form.

"5. It should prescribe reasonable rates.

"6. It should provide for the safety of employees and for the protection of the public and generally to direct whatever may be necessary or proper to safeguard the public interests and to secure the fulfillment of the public obligations of the corporations under its supervision.

"7. It should make provision for suitable inspection so as to be in a position to take action on behalf of the people without formal institution of proceedings on complaint.

"8. It should visit with appropriate penalties corporations, officers or responsible persons who are guilty of disobedience to its orders.

"9. It should be entitled to institute legal proceedings for enforcements of its orders and all such proceedings should be expedited by suitable preference by all courts of the State.

"10. The commission should have jurisdiction over all traffic between points within the City of New York and points elsewhere in the state thus allowing the whole question of transportation and gas and electric service to be dealt with by the Commission in an intelligent and efficient manner."

It may be said that public service commissions have realized to a considerable extent the objectives listed above. No one will dispute the advances made over the preceding period when the utilities were subject to the more or loss haphazard and erratic control of the State legislatures. It is a question, however, as to whether the commissions have used their initiative in safeguarding the public interest. In the present method of control there is also the tendency that is inherent in administration, both private and public; that is, the tendency to establish and follow a routine more or less uncritically. If the observation that "government is not a routine to be administered, but a problem to be solved" were ever true, it applies in an unusual degree to the administration of the public service commission today. If ever alertness and initiative were called for on their part it is at the present time. The routine of yesterday is entirely out of place in the conflicting and turbulent currents of today. Indeed, nothing less than the transforming changes have been taking place in the utility industry in recent years. One need only refer to the spread of holding companies, power transmission and the growth of bus transportation.

It is distinctly to the credit of the Public Service Commission that it has strained existing legislation almost to the breaking point in its handling of the bus situation and that it has also helped in framing a bill that would give it the authority to properly regulate this new industry. It is also to its credit that it has urged the passage of a bill that would give it added authority to deal with holding company situations.

On the other hand, it has failed to use the measure of authority which it already has under section 5, subsection 7 to investigate the contractual relations between operating units and companies holding more than a majority of this stock. Its accounting system is quite inadequate for the purpose of determining the equitableness of rate schedules. Except for the limited number of companies which have been involved in rate cases, it has only book costs for valuation purposes which are neither accepted nor used by the utilities in figuring the base upon which they estimate their net returns.

It should be said in defense of the Commission that to accomplish any of the tasks adequately that it has been called upon to do, would require a larger staff than it now has. Both the Commission's time and that of its staff is practically absorbed by the unremitting pressure of routine investigations, petitions, reports, hearings and complaints. This may account in part for the failure of the Commission to meet the duty imposed upon it, of investigating on its own motion. It appears from the exhibit submitted by the Commission that during the period from 1921 to 1928 the Commission instituted 210 proceedings of this type. According to the data furnished in Exhibits 17–23, inclusive, it appears that the larger part of these proceedings fell in the years 1921–1923. A total of forty-six was scattered over the period 1924–1928, the average per year being slightly more than nine. The majority of the cases had to do with the filing or the failure to file annual reports or to supply information; forty-eight with rates or charges for the different utilities, and the balance, fifty-six, with miscellaneous matters. It is seen that the majority of the proceedings dealt with the failure to file reports or to supply information.

In passing judgment on the extent to which the Commission started proceedings on its own motion, it should be pointed out that a considerable majority of these cases came to the attention of the Commission by reason of complaints in the first instance. On account of their apparent importance the Commission moved to take formal action and order hearings. It could hardly be argued that an extensive use of the power of initiative with which it was endowed under the law had been made by the Commission.

According to several corporation counsels there is a definite desire on the part of these officials that existing practices should be modified so that the municipal representatives might have active cooperation on the part of the Commission in the handling of rate problems. In their final report presented to the legislative commission in the hearings at Syracuse, the corporation counsels made a request for the establishment of a special unit in the Public Service Commission which would serve as a clearing house for pertinent information, as well as a center for advice in handling rate and other utility problems. It was argued that such an arrangement would not alone save expense to the cities, but that it would also provide the guidance and advice of which the typical corporation counsel, who is more likely than not to be inexperienced in utility matters, is in need. Taken as a whole the testimony on this matter was most contradictory; the members of the Commission taking the stand that the corporation counsels did not want assistance in the handling of rate cases and that where it was wanted the Commission had supplied it so far as was necessary, while the corporation counsels maintained the contrary.

According to the law it is possible for twenty-five or more bona fide consumers of gas or electricity to file a complaint with the Commission with the expectation that the Commission shall immediately institute a formal proceeding. A review of the cases for the years 1927–28 shows that there were nineteen such cases initiated in this way.

In accordance with the established procedure as soon as such complaints are filed and the names checked, the complaints with the names of the signers are forwarded to the utility concerned, with the instructions that the burden of proof as to the fairness of the rates objected to rests upon the company.

Reference to the files showed that fourteen of the nineteen cases were dropped because of the withdrawal of names, thus reducing the number of signatures below the prescribed quota. The consistency with which names were withdrawn led to an investigation as to the reasons for such action. Replies to the letter of inquiry indicated that the complainants had been approached either directly or indirectly by the representatives of the companies concerned and through them had been convinced that it was not to their interest to press the matter, either because a formal proceeding would result which would entail considerable expense for the consumers or the municipality in which they lived, or, on the other hand, that the company could not afford to charge lower rates in view of costly extensions that were then being contemplated. Although neither of these arguments would justify high rates, the question at issue, the complainants were willing to withdraw their names.

As a consequence of these conditions it is asserted that the Commission has come to depend upon the public either to carry on the defense of its own interests, as in the case of the municipalities, or to initiate action by the complaint method, and that the initiative has been transferred from the Commission to the public.

As has already been pointed out, the time of the Commission is practically absorbed by the truly great volume of routine work that regularly flows into its offices. Even all of this it has been unable to handle adequately on account of staff limitations, as will be shown later. It is therefore practically prevented from making investigations that would aid in the solution of what may be called long-run problems. Take, for instance, in one of its primary functions, the supervision of rates which are to be determined on base values, its information is limited to book costs, where there have been no rate cases, *i. e.*, for the majority of the utility companies. It is obviously impossible to regulate rates without an accepted rate base. How far removed book costs are from acceptable rate bases was evidenced by the protests filed by the companies against the data submitted in Mr. Fitzpatrick's survey last spring (Exhibit 125 A, B, C, D). The complicated questions of going values, depreciation reserves and reproduction costs, so essential in modern rate fixing, have hardly been grappled with, to say nothing of solved.

The matter of rate structures, the determination of the equitableness of rates between different classes of customers, the amount of savings realized through consolidations are other special problems which require careful and intelligent research. The obvious need of constructive inquiry into such matters led to the suggestion that a research unit be established in the Commission.

All of the Commissioners who testified on the desirability of a research unit connected with the staff expressed themselves unqualifiedly as favorably to the proposal originally made by Mr. Prendergast. At the request of the Legislative Commission for specific suggestions from Chairman Prendergast, he proposed that the staff consist of the following employees:

1 Employee	$7000.00	
1 employee	5000.00	
2 employees	4000.00	each
2 clerks	1500.00	each
2 stenographers	1200.00	each

Commissioner Brewster proposed a staff of 3 accountants and 2 clerical employees and estimated that $30,000 would be required for the budget of this unit (3776).

In view of the scope and character of the work to be undertaken and the possible savings to the consumers of the state, it is believed that such a provision would be both conservative and sound. The only modification that might well be considered is that the head of the research unit occupies so important a position that in authority and salary he should be on an equal footing with the Chief Engineer and Chief Accountant of the Commission. In this case he should receive either $9,000 or $10,000 a year. This implies that he would not report to the heads of the two technical bureaus, but directly to the Commission itself.

In view of the above circumstances it is suggested that a special appropriation be made each year to the amount at least of $27,000–$28,000 for the purpose of maintaining a research unit in the Public Service Commission. It is the belief of the members of the Commission that the scope and complexity of the problems involved in utility regulation call for such an expenditure and further that this investment will yield returns in excess of the amount appropriated through the results of the investigations that will be made.

COMMISSION'S STAFF AND APPROPRIATIONS

A. Staff

The staff of the Public Service Commission is composed of 268 individuals divided into five groups, executive, legal, administrative, engineering and accounting. The table given below indicates the size of the staff in the five groups for the years 1922–1929. It will be seen from an examination of this table that the engineering division has increased from 100 to 149, a gain of 50%, while the other divisions have remained almost constant over the whole period.

TOTAL NUMBER OF POSITIONS IN PUBLIC SERVICE DEPARTMENT, 1922–29[1]

Division Positions	1922	1923-24	1924-5	1925-6	1926-7	1927-8	1928-9	1929-30
Executive	9	9	9	9	9	9	9	9
Legal	10	10	11	11	11	11	11	11
Administrative ..	65	63	50	50	53	53	53	53
Engineering	100	113	129	127	135[3]	138	149	149
Accounting	47[2]	44[2]	44[2]	44[2]	45[2]	46[2]	46[2]	46[2]
Totals	231	239	243	241	253	257	267	268

[1] For which regular appropriations were made.
[2] Excluding temporary services.
[3] Increase due to grade crossing act.

In the hearings before the Investigating Commission, Chairman Prendergast testified (65) that the Commission could extend the scope of its operations if it were more largely staffed and could thus be of greater value to the state. He also pointed out that motor bus regulation and the growth of gas and electric utilities had led to greater responsibilities which had not been met by a corresponding increase in the staff. Commissioner Lunn (1008) indicated that the Commission could do more effective work and accomplish a good deal more if the staff were increased in size. Commissioner Brewster testified (3792) that a considerable addition to the accounting personnel was necessary, but only one new position was requested in 1929 and this has been granted in the budget. Mr. Fitzpatrick, Chief Accountant, expressed the opinion (3183) that fifteen more accountants were needed to make examinations and further that he tried to make examination of old companies as far as possible every two years, but on account of lack of force, was unable to do that with every company (3176–77).

The general opinion has been that the staff of the Commission was not adequate to meet the needs of the situation. When one considers the expansion of the Commission's duties as this is roughly reflected in the new securities issued from 1922–1928, i.e., nearly $2,000,000,000, it is readily apparent that there has been no proportionate increase in the staff.

On the other hand, the requests for new staff positions as filed with the Bureau of Budget from year to year, does not give evidence of any serious amount of under-staffing. The Executive and the Legal Divisions made no requests for new positions from 1924–1931, except that the latter sought two stenographers. The number of accountants requested from 1924–1931 inclusive was but five. Of these four were allowed by the Legislature.

In the Engineering Division there has been a marked expansion, most of which is due to new responsibilities in connection with grade crossing elimination. According to the filed requests, there has been a marked need of an expansion of the inspectional force. Thirteen were asked for in 1925–26 35,000 G. C. E. and varying numbers from ten to none in other years. These requests have been consistently disallowed except for a single position.

The requests for new positions in 1930–31 called for only one accountant, two engineers and one Assistant Chief of the Rate Section. Of these all but the last was allowed.

In view of the unquestionable and unprecedented growth of the utilities in the state, particularly in the electrical and bus branches, and in view of the consensus of opinion as to the fact of under-staffing, the question was properly raised as to the reason for the limited requests for new positions. To this Chairman Prendergast expressed himself as follows: "Experience of a long time with the legislative mind and the legislative practice has shown how ineffective it is to beat one's head against a stone wall" (483).

When asked as to whether a general program for needed expansion had been presented to the Commission, the Chairman stated: "that no comprehensive plan has been made to show what would be necessary to do all its work within what we would call the shortest possible time or extend the breadth of its work" (493). Commissioner Lunn subscribed to this position as well (991).

When one takes into account both the growth of the utilities and the increasing complexity of their organization on the one hand, and the possibilities and need of improving the technique of regulatory procedure on the other, there can be no doubt either as to the propriety or the obligation of the Commission to insist to the limit of its authority on satisfactory provisions for staff increases. The number of new positions in relation to the requests allowed by the Legislature indicates that the latter has not pursued what might be called a niggardly policy except in the case of inspectors. If, in its annual request, the Commission had not alone asked for staff increases proportionate to the increasing scope of its work but supported such requests by tangible data, the responsibility would obviously rest upon the shoulders of the Legislature in case of major cuts. There is perhaps no investment of state funds which brings such large returns to the public as investment in utility regulation. Evidence of this may be found in the experience of Utica where a rate case was prosecuted by a group of consumers and the city at the cost of $57,000. This netted the consumers of that city reductions which, it is estimated, will total $220,000 per year. It is not suggested that this is a typical situation, but at the same time it indicates somewhat the possibilities of the advantage of investing ample funds in regulation. The more or less docile acceptance of unwillingness on the part of the Legislature to provide for an increase in needed funds should, it is believed, be replaced by a policy of insistence upon what appears to the Commission to be satisfactory appropriations, particularly for staff increases.

In view of the fact that, on frequent occasions during the course of the testimony, various Commissioners indicated that one or another function had not been fully and satisfactorily carried out because of lack of staff, this Commission requested that the Commissioners should set up what they consider to be necessary additions to the staff. The memorandum proposes 91 positions ranging

from that of page to that of Assistant Engineer and Accountant. To provide for such positions the salary budget would have to be increased $132,800. On account of the importance of this proposal it is appended to the Report.

Salary Policy

This review of the salary lists of the Commissions staff, together with a consideration of their duties was prepared by Dr. Crawford.

The basic principle of a sound salary policy is not observed. This is that titles should be descriptive of duties and that salary rates should be standardized with reference to the different classes of employees according to their work.

It is further requisite that a range of salaries be established for each class of employees so that experience and efficiency may be recognized through a system of increases from the minimum to the maximum. Consideration of the increases granted for most of the positions over a number of years leads to the conclusion that no given policy is followed. Varying amounts of increases for the same class of position appears in frequent instances, as well as the absence of any increases for a period of years in others. It was indicated by the Chairman that there was no policy with reference to salary increases (503).

It is generally known that this situation is not peculiar to the Public Service Commission, but is rather characteristic of many, if not most, of the Departments of the State Government. Reports from Albany indicate that interest in the matter of salary standardization has again come to the fore. Bills have been introduced both in the Senate and in the Assembly looking toward the adoption of this policy. Representatives of the employees of the Commission also presented a carefully prepared brief on this subject. In the name of justice to employees, of simplicity of administration, as well as in that of economy, it has been strongly urged that legislative action be taken, providing for classification of State employees on the basis of duties performed, and that a standardization of salaries be adopted along the lines followed by progressive Governmental authorities in various parts of the country. In this way salary increases will not become a matter of chance or influence but, if deserved, a matter of right. In case action in this direction is not taken for all of the workers in the State Government, it was recommended that the Public Service Commission itself work out a scheme of salary standardization for its own staff and present it to the proper authorities in the Legislature.

Both the representative of the employees and members of the Commission indicated that salaries paid staff members of the Public Service Commission are below the level paid in other Departments. Although there are discrepancies, a comparison of salaries paid certain of the more common positions in the Public Service Commission and other departments does not indicate that the general level is lower than that maintained elsewhere. It is, of course, recognized that any such comparison is far from convincing without a careful analysis of the duties of positions compared. If titles are any indications of duties, as they probably are to only a limited degree, the staff of the Public Service Commission is paid according to prevailing standards in the State Government.

It was also urged that the salaries in the Albany District were lower than those in the New York District for the same type of work. This comparison is not entirely valid because of the fact that living expenses in New York are higher than in Albany. The cost of living is, of course, one factor to be taken into account in connection with salary determinations.

The comments on salaries are not to be taken as an opinion of the general adequacy or inadequacy of salaries. Some of them were distinctly below what would be considered a fair wage for the service performed, while others were equal to what is being paid for like service elsewhere. But time limits made it impossible to carry out a proper investigation of this important phase of the administration of the Commission. It was definitely recommended however that such an investigation should be made, either under the auspices of the Commission or the Legislature, so that the existing chaotic conditions may be remedied.

Investigation was made of the turn-over in the Commission's staff as a fairly reliable indication of the adequacies of salaries. The turn-over for two years was found to be in the neighborhood of 10% and the major part of this took place in the clerical staff of the various Divisions of the Commission. In other words, the turn-over in the technical staff appears to be unusually low. (Prendergast, 498.)

Hearing Deputies

The Commission has at times authorized qualified lawyers, engineers, and accountants to act as deputy commissioners and conduct hearings. In the 1928 Report, a table is appended giving the list of the proceedings not reported in full with the name of the hearing commissioner. In this list are 344 proceedings of which 216 were heard by others than Commissioners. It is clearly evident that the Commissioners cannot hear all the cases and must depend on members of the staff in many instances. No question can be raised as to the competency of these staff members, but a serious question is raised as to the economy of the practice. Some of these men have administrative and technical duties to perform and if their time is taken by hearings, the efficiency of their work is diminished because of the time devoted to hearings. The suggestion has been made that hearing deputies be appointed who would devote their time to the work of hearing cases which are not listed as major problems. These deputies would have no other duty and would prepare memoranda to be submitted to the Commissioners for their action. Commissioners Van Namee and Pooley opposed the plan on the ground that a hearing deputy might not have the required experience (1094). That point is well taken and it is also

true of some Commissioners and staff members. The hearing deputy would have to acquire experience as the others have done. One Commissioner urged that consumers might feel slighted if a Commissioner did not appear. Mr. McCaffrey, who presented the memorandum from the Mayor's Conference, expressed the idea that no one would object to the hearing deputies.

Four hearing deputies at a salary of $10,000 each would, it is believed, add materially to the efficiency of the Commission and would involve no expense other than the salaries, as expenses are already paid for the staff members who go out on this work. Each Commissioner could be assigned a deputy who would work as an assistant and submit his memoranda to the Commissioner for presentation to the Commission.

Research Staff

One of the most important additions to the staff has been considered in some detail under the preceding section on the New York State Commission. It has recommended here that $27,000 to $28,000 be appropriated annually for the maintenance of the Research Staff.

B. Financing the Commission

The appropriation to the Public Service Commission amounts this year to $932,585.04. This is a large sum but even so, as was frequently pointed out by various witnesses, the Commission has been prevented from carrying on the work assigned to it adequately because of financial limitations. As has been repeatedly stated by public health authorities, "community health is purchasable," so it may be said that "utility regulation is purchasable." In other words, there is a direct correlation between the adequacy and character of regulation and the amount of money spent on it. An effort was made to discover some sort of an index that would approximately reflect the expansion of the Commission's responsibilities. In view of the complexity of its duties no single method of measurement will suffice. In general, however, the securities issued indicate somewhat the extent of new responsibilities. Not alone must the engineering and accounting staffs make investigations in connection with such issues, but new investments are likely to mean developments of the utilities which in turn involve supervision and control. For this reason, we have brought together a list of the securities issued from 1922-1928. This list follows:

SUMMARY TABLE OF SECURITIES APPROVED
1922–1928*

Year	*Approved Since 1907 Total*	*Approved Year of*	*Total*
1922	1,566,475,669	313,035,594	1,879,511,263
1923	1,879,511,263	134,339,075	2,013,850,338
1924	2,013,850,338	144,053,440	2,157,903,778
1925	2,157,903,778	357,728,775	2,515,682,553
1926	2,515,682,553	147,117,628	2,662,772,931
1927	2,662,772,931	487,643,373	3,150,443,554
1928	3,150,443,554	70,340,460	3,220,784,014

* Excluding Steam Railroad Securities.

It appears that the increase has been somewhat less than $2,000,000,000 which means an increase of 80 per cent.

If the above even remotely measures the expansion of the Commission's obligations a marked contrast will appear when one considers requests and appropriations to the Commission over the period 1924–1929. The following table summarizes the requests and appropriations for this period.

SUMMARY TABLE OF REGULAR APPROPRIATIONS AND RECEIPTS

Year	*Requested*	*Appropriated*	*Expenditures*	*Receipts*
1924–25	$770,818 00	$771,149 50	$739,549 40	$7,574 63
1925–26	838,932 80	778,250 00	752,099 19	8,493 36
1926–27	877,051 50	842,220 00	841,921 61	7,016 16
1927–28	956,396 50	868,356 00	854,786 91	6,005 05
1928–29	945,353 50	884,332 00	830,848 37	5,411 21

The total increase in the course of the five years is slightly more than $100,000. If this were expended entirely in the form of salaries it is clear that the staff could have expanded in only a limited degree.

In case the financial policy followed by the Legislature does not permit of more generous appropriations to the Public Service Commission, it is recommended that consideration be given to methods of financing the Commission which are adopted in a number of other states in the Union. For instance, the cost of valuation appraisals, etc., are charged against the utilities in Alabama and Tennessee. The cost of investigating and approving security issues are paid by the utilities in Michigan, Nebraska and New Hampshire. When the California and most commissions make investigations for cities, this is charged against the cities. The entire costs of regulation are paid by a general fee against the utilities in Georgia, Louisiana, Ohio, South Carolina, Washington and West Virginia.

The members of the Public Service Commission who were questioned on the desirability of financing the Commission by assessments upon the utilities expressed themselves as unfavorable to this proposal. (Prendergast 960-962.) At any rate it is a feasible plan and should be given consideration if for any reason the Legislature is unwilling to supply adequate funds each year for a much more intensive and comprehensive administration of the Public Service Commission.

VALUATION, RATE OF RETURN AND REGULATION OF RATES

In the discussion of valuation for rate making purposes it is necessary to keep in mind the attitude of the utilities in regard to this problem. Mr. Floyd Carlisle in his testimony before the Commission stated that "since the Federal Courts have adopted rules of rate making, no one was considering the book values of the stocks of operating companies as a measure of determining their rates, or as a measures of their values. The value for rate making purposes is the sound reproduction value of the properties engaged in giving the service at the time the rate issue is up."

I. Valuation for Rate Making Purposes

The basis of this study was prepared by Doctor Mosher and Mr. Scharff and I have made full use of their analysis and conclusion for the purpose of this memorandum.

There is no problem confronting the utility managers and the public which is more complex and about which opinion is more at variance, than the problem of valuation. Upon its proper solution greatly depends the future of public utility management. The Supreme Court in its various decisions has built up a policy for determining values that has resulted in a variety of interpretations. This has resulted too frequently in failure to adopt a consistent policy of rate control. The testimony in these proceedings shows that in New York State in the absence of such a policy each case must be handled for itself. Furthermore, the testimony shows that where valuations have not been determined in a formal rate proceeding, the Commission had only book costs at its disposal which admittedly were inadequate for the determination of a rate base. Where valuations have been made and a rate base determined, rate regulation becomes in large part a matter of arithmetic, but without it such regulation is at best an approximate guess.

What in the course of practical administration must necessarily be a precise process, that is, the multiplication of one figure representing the rate base by another figure representing the rate of return, becomes in view of the above uncertainties a matter for investigation, hearings and compromise. Moreover, a rate base determined after extensive and costly proceedings before the Commission or the Commission and the court loses in validity as time goes on because of the variable factors. In the absence of such formal determination the average commission is bound to follow a more or less rough rule of thumb method.

When it is considered that the total annual income of all of the public utilities in the country approximates $10,000,000,000, the necessity of subjecting the methods whereby such earnings are determined to the most careful criticism and review is obvious. This is a matter of national concern. If, on the one hand, both the commissions and all of the Federal courts devoted themselves exclusively to the judicial handling of rate proceedings and cases, it would require years to cover any considerable number of companies a single time. The costliness of any such procedure can hardly be imagined. If, on the other hand, valuations are not set by this judicial process the rule of thumb policy is the only alternative, a policy dictated by the fact that the commissions do not have and cannot get without extraordinary efforts the data necessary for accurate determinations. Since either alternative is at best a makeshift, it is reasonable to expect that substitute methods must be devised in the name of workable administration as well as in that of fairness both to the companies and the public.

PRACTICE OF THE NEW YORK STATE COMMISSION

A review of the testimony of all of the members of the Commission, and such members of their staff as testified before this Investigating Commission indicates that the policy and practice of the Commission with respect to valuation and rates may be described as follows:

1. The Commission has no completely defined policy and each case must be handled largely on its own basis (Van Namee 1100).
2. Subject to the above, the Commission usually gives consideration to cost of reproduction less observed depreciation, including working capital and going value and to original cost in determining value in rate cases.
3. The Commission does not make independent inventories and reproduction cost estimates through its own staff, but reviews and spot checks inventories and estimates submitted to it in rate cases, usually by the company, because municipalities ordinarily do not present such data.
4. While the Commission evidently endeavors to give sufficient weight to cost of reproduction less observed depreciation, in determining value in rate cases, to avoid the probability of reversal by the courts under the Supreme Court doctrine, it is apparent that it gives as much weight as it feels it can to original cost. And as a matter of fact, the values found by the Commission have generally been substantially below the claims submitted by the companies.
5. No routine or systematic method of periodically checking of the reasonableness of rates has been developed by the Commission, and no comprehensive data as to valuation are available for this purpose except figures of book cost as reported in Annual Reports to the Commission.
6. However, the staff and the Commission keep generally in touch with the status of the companies, and the relations of their earning to book values and when they consider it advisable, undertake to negotiate rate reductions.
7. Such negotiations are normally conducted on the basis of book values (Prendergast 597, 620) and although the companies generally deny that such basis is the value of their property, they frequently make reductions rather than undergo the expense and trouble of a rate case (Prendergast 626).

Mr. Prendergast was of the opinion that the rates resulting from these practices are generally fair throughout the state, and as fair as could be arrived at even by the most accurate, detailed computations (538); and that better results had been and can be accomplished by negotiations than by formal rate proceedings (124). He agreed, however, that the work of the Commission would be facilitated if a definite rate base and rate of return could be fixed in some manner, and the necessity of establishing value anew in every

rate case eliminated, and he made certain suggestions to this end which will be discussed later.

Commissioner Lunn went even further in support of the practice of rate regulation by negotiation, with utilization of book values for negotiation purposes, stating "And with me there is a veritable fear of starting a rate case and getting trimmed because of the reproduction cost theory, which is a menace" (999).

Serious doubt has been expressed, however, of the validity of the conclusions that rate reductions have been as great, or as promptly made, as could have been required by more aggressive action by the Commission based on more complete information. Furthermore, there is doubt as to the wisdom or probable success of regulation by private and more or less confidential personal negotiation. In such proceedings, the company president has a distinct advantage, due to his more complete information and the lack of complete information on the part of the Commission. The desirability of change in this respect has been suggested as one of the strongest arguments for the establishment of some form or fixed rate base and rate of return, which may be applied for a period of time largely by means of accounting control, and it is to the various suggestions that have been made looking to this end that we now address ourselves.

SUGGESTED MODIFICATIONS OF METHOD OF VALUATION

In view of the uncertainty that has come to surround the meaning of "fair value," and the relation of valuation to rate making, as discussed above, it is not surprising that numerous suggestions have been made for modification of past procedure and practice with respect to these matters. Many of these suggestions were discussed before the Investigating Commission by their respective protagonists, while other witnesses criticised the suggestions offered and criticised or upheld the present method of regulation, based on the Supreme Court doctrine of valuation. A summary of all of the testimony on this subject would be too voluminous to be useful. For the purpose of this report, therefore, only the principal suggestions are presented.

BAUER PLAN

The first proposal of this character to be brought to the attention of the Investigating Commission was embodied in the suggestions of Dr. John Bauer. It is referred to in numerous places in the record as the "Bauer Plan." This proposal, which had previously been developed in the public writings and addresses of Dr. Bauer, was first introduced by counsel in asking Chairman Prendergast to express his opinion of the plan (774) and later presented by Dr. Bauer himself (4313ff.).

Briefly, the plan purposes that a valuation be made of all public utilities subject to the jurisdiction of the Commission at some fixed date, basing such valuations fairly upon the principles laid down

by the Supreme Court, and that such valuation of the existing property be made by legislative mandate the value for rate making, to which after proper adjustment for retirements and changes in accrued depreciation as reflected in accounts correctly kept under the supervision of the Commission, a fixed rate of return, determined by the Commission, shall be applied, as long as any portion of such existing property shall be continued in public service. All additions made subsequent to such date of initial valuation, are to be added at actual cost, as recorded in accounts correctly kept under the supervision of the Commission and a fixed rate of return, determined by the Commission shall be applied, as long as any portion of such existing property shall be continued in public service. All additions made subsequent to such date of initial valuation are to be added at actual cost, as recorded in accounts correctly kept under the supervision of the Commission, and to such actual cost shall be applied a rate of return based upon the market cost of additional capital resulting from the actual interest rate on bonds, the actual dividend rate on preferred stocks, and a fixed dividend rate, determined by the Commission, on common stocks, all as fixed by the Commission from time to time as additional securities are issued.

Dr. Bauer expressed the opinion that such a plan would probably be upheld by the courts, if properly instituted and fairly administered, but agreed that if conditions should change so that actual confiscation resulted, it would not stand the test of constitutionality (4335). Almost all of the witnesses whose opinions were asked on the plan, were of the opinion that the plan at the very outset would prove to be confiscatory and therefore unconstitutional. Thus Mr. Brewster said (3929-3930):

> "I do not believe that Dr. Bauer's plan is practicable of operation."
>
> Q. "Tell us why not?"
>
> A. "In the first place, because any rate base fixed by a legislative act would, in my judgment, be open to rejection by the Supreme Court on appeal on the ground that it did not represent present value. The Supreme Court has stated that value must be of the time of fixing the rate.
>
> "Now in the second place, I believe that it is too rigid and that it would not permit of the adjustments which might be necessary because of local conditions, and the changes in industry."

(Prendergast 294, Van Namee 1165, Hadley 1475, Goldberg 1652, Ellis 2992, Forstall 3893, Brewster 3929, Riggs 3994, Cortelyou 5002, Willis 5280, and others).

Those who believe that the Bauer plan would be held constitutional by the Supreme Court of the United States base their arguments upon the following grounds:

1. That if the economic reasons which are claimed to show the practical desirability and necessity of the plan are fully presented

to the Supreme Court that body would be impelled to interpret the law of the land in the light of that necessity. In reply to this it has been said that this reasoning is fallacious, in so far as it is based upon the assumption that the Supreme Court has never before had fully presented to it the arguments of those who insist that the value of public utility property for rate making purposes should not be influenced by any change in price levels.

It has been pointed out that the court has had presented to it all sorts of arguments based on grounds of economic theory against a consideration of reproduction costs and in favor of the adoption of the original cost standard, through decisions of the Interstate Commerce Commission, arguments of counsel and debates in Congress. The Supreme Court has consistently repudiated this doctrine.

2. That a statute which would declare the policy of the state and would attempt by mandatory legislation to enforce upon utility companies what is conceived to be desirable economic policies will so change the nature of vested property rights under the constitution that former decisions of the courts will no longer be a guide in determining those rights. However, in reply to this it has been said that the courts have never given legal sanction to the theory that a state by legislative fiat can deprive a utility of a reasonable return upon the fair value of the property which it is devoted to the public service at the time the inquiry is made.

It has been pointed out also that the court has repeatedly held that if the value of the property increases the company is entitled to the benefit of such increase, and if it decreases the company must bear the burden of such decrease.

Opponents of the plan assert that the principle that the state cannot by legislative mandate deprive the company of the right to have included in the rate base any increase in the value of its property, has been clearly enunciated by the Supreme Court in the cases involving the so-called One Dollar Gas Law of New York. This law consisted in fixing by statute the rate to be charged for a given quantity and quality of gas. The Supreme Court, in upholding the constitutionality of the law, stated in its opinion that the law was not so clearly confiscatory that it should be declared unconstitutional before it had been tested out by experience under actual operation. The Court was careful to state, however, that if at some time in the future the rate should become confiscatory by reason of changes in the basic value of the company's property, the company would then be entitled to bring another proceeding to determine the reasonableness of the rates. Such a proceeding was subsequently brought, and the law was declared by the Supreme Court to be unconstitutional because of the changed conditions.

It has, therefore, been contended that if the legislature may not by statute fix a rate which will in the future be upheld by the courts in the event of an increase in the basic value, it is not clear how the State by legislative fiat could legally fix a base value for existing properties which would not likewise be invalid in the event of an increase in values. It has been urged that this can only be brought about by agreement, rather than by coercion.

Finally, opponents of the plan have pointed out that the state cannot indefinitely suspend its sovereign right to regulate the rates of a public utility; and that a statute which purported to "freeze" the value of existing properties would substantially deprive the state of its power to regulate rates.

The argument for the legality of the plan in regard to future acquisitions of property would be based primarily upon the ground that the company had not acquired any vested rights with regard to such property and would acquire rights in the future with knowledge of, and subject to the limitations imposed under legislative authority. However, it has been contended that the arguments against the validity of the plan in regard to existing property would equally apply to future acquisitions of property.

PRENDERGAST PLAN

In objecting to certain features of the Pauer Plan, Chairman Prendergast presented a suggestion of his own (815ff.), based upon a public address previously delivered by him (in 1928) before the American Gas Association, and which is referred to at numerous points in the record as the "Prendergast Plan."

This plan in brief provides for a biennial fixation by the Commission (by negotiation and agreement with each company) of a rate base and a rate of return to be applied to it. The rate base, it is suggested, should be equal at each biennial date of fixation of the rate base to the actual cost of all fixed property, except land, installed prior to June 30, 1917, multiplied by a ratio or index number to convert such cost figures in dollars of their respective years of installation to dollars of the date of fixation of the rate base; plus the actual cost of all fixed property, except land, installed subsequent to June 30, 1917 (except that it was also suggested that some items in this category might also have to be multiplied by index numbers); plus the value of the land at the date of fixation of the rate basis; plus proper allowances, fixed by the Commission at each such date of fixation of the rate base, for working capital and going value; less observed depreciation—except that where depreciation reserves have been accumulated on a straight line basis, consideration should be given as to whether the excess amount in such reserve, if any, should not also be deducted.

To this rate base should be applied a fair rate of return, suggested as 7 per cent., and rates should be reviewed at each such biennial period, to determine whether the difference between such fair return and the actual net income justifies any revision of rates—keeping in mind the division of any excess earnings between the consumers and the company, in such a way as to promote economy and efficiency on the part of the management.

Chairman Prendergast expressed the view that this plan would be advantageous to the companies and the consumers, and would

greatly simplify and decrease the work of the Commission. He was confident also that, without giving the plan any legislative sanction, its fairness would appeal to the companies, most of whom would be willing to cooperate in making it effective. He agreed, however, that any company that did not accede to the plan and stood on its constitutional rights could defeat it (837). And most of the witnesses who expressed opinions on the subject felt that, while the plan had some desirable features of elasticity, it would be subject to the same constitutional objections as the Bauer Plan if any attempt were made to make its application mandatory. Certain of the witnesses also objected to the plan on the ground of the improbability of general voluntary agreements by companies, particularly if they had to be reviewed every two years, and of its erroneous assumption as to the adequacy and correctness of available index numbers. (Van Namee 1165, Hadley 1477, Goldberg 1653, Ellis 299, Brewster 3934, Bauer, 4341, Cortelyou 5002, Willis 5275.)

THE INTERSTATE COMMERCE COMMISSION PLAN

Reference was made by a number of witnesses to the attempt of the Interstate Commerce Commission to utilize its valuations of the railroads based on cost of reproduction new of property installed prior to June 30, 1914, (excepting land) at 1914 prices, plus actual cost of property installed after June 30, 1914 (except land), less accrued depreciation plus value of land at date of valuation, and plus an allowance for working capital, as a basis for recapture of earnings under the Transportation Act. This attempt was voided by the Supreme Court in the famous *O'Fallon* case (*St. Louis & O'Fallon Railroad Co.* v. *United States*, 279 U. S. 461), in which the majority of the court (with three members dissenting) held that the Commission had failed to give "due consideration to all the elements of value recognized by the law of the land for rate-making purposes."

Subsequently, and after the close of the hearings before this Investigating Commission, the majority of the Interstate Commerce Commission (with one member, Commissioner Woodlock, dissenting) adopted a report of its legislative committee to the Chairman of the Interstate Commerce Committee of the United States Senate, recommending that Congress lay down, by a declaration of legislative policy, a method of determining a rate basis for recapture purposes by a modified method which would "reduce the task of bringing valuations up to date to a purely accounting process."

This modified method, as proposed, would determine valuations at any time "by taking the cost of reproduction new at the 1914 unit prices of the property existing on the original valuation data, plus the value of the lands, adding or subtracting the subsequent net increase or decrease in the property investment account as shown by the accounts, when correctly kept, adding further a proper allowance for working capital, and deducting the balance standing in the depreciation reserve."

Commissioner Woodlock dissented on the ground that neither the proposed "rule," nor any other "rule" of determining value can be made "the law of the land" by any form of legislation. In his opinion he stated that

> "The 'law of the land' which governs valuation of property used in public service rests upon a constitutional and not upon a legislative foundation, and it cannot be changed by statute. Nor can it be affected by declarations of 'policy' by the legislature."

Many students of the decisions of the Supreme Court appear to agree with Commissioner Woodlock. And it has been urged that because of the possible, if not probable, constitutional complications this proposal should not be applied to the problem in hand.

THE MASSACHUSETTS PLAN

Massachusetts has had a particularly long and interesting experience in rate regulation, and has a state policy relative to these problems which is in many respects unique. Accordingly, the Investigating Commission invited Chairman Atwill (1522-1582) and Commissioner Goldberg (1582-1671) of the Massachusetts Department of Public Utilities to explain the Massachusetts policy.

The Massachusetts Plan is commonly referred to as an application of the "prudent investment" theory, but while this may be considered a correct statement, the testimony of Mr. Atwill and Mr. Goldberg shows that it is not so based in the manner usually assumed. For it is not the "prudent investment" in fixed assets with which the Commission concerns itself, but rather the investment which has been made by the stockholders, as reflected in the capital stock and premium accounts on the liabilities side of the balance sheet. Such accounts have been kept under the supervision of the Commission because of the fact that the stock issued from time to time is subject to the Commission's approval.

In other words the Massachusetts Plan, as explained by Mr. Atwill and Mr. Goldberg, is founded on a policy of more than a hundred years' standing, which provides that the relations between the state and the utilities is mutually fair when the state approves the issue and the issue price of every share of capital stock; and when rates are so fixed as to permit dividends on the stock that will attract new capital as required, and will maintain an open market price for the stock at least equal to the price at which it was issued (Atwill 1527). This is accomplished by fixing rates so as to yield, on the capital stock and premium, a rate of return which is varied according to the judgment of the Commission, taking into account "the efficiency of the company, the efficiency of its management, the question whether it has placed back earnings into additions to the plant, the amount of depreciation it has taken, the amount of its surplus" (Goldberg 4699). Under this system of regulation, according to Mr. Goldberg, "the only issues that can arise in a

rate case are whether the operating expenses are too large or too small, whether the company is taking too much depreciation or too little, whether they are improper or improvident contracts or management fees, and whether the rate of return in the particular case shall be so much or so much." (4702.)

This theory appears to be inconsistent with the principles laid down by the United States Supreme Court, which both Mr. Atwill and Mr. Goldberg insist are necessarily destructive of effective regulation. Nevertheless Mr. Atwill testified that in fifty years of regulation, there had been only four appeals to the courts in rate cases—one to the state court, which was decided against the company and three to the Federal District Courts, all three of which were withdrawn by the companies before coming to actual adjudication.

Almost the only explanation offered by Mr. Atwill for this remarkable record, by comparison with the experience of other states, was his statement at page 1526 of the record:

> "I have often said that I think the people of Massachusetts would quickly go into the business themselves, take the whole undertaking over themselves, rather than pay much more than what they have been paying under our system of regulation. And I think they would. So the problem really in our State is, are the utilities going to force public ownership and public operation by demanding what they claim are their constitutional rights, or had they rather go along as they have in the past, undertaking what we visualize as a public function and getting a reasonably fair return for the undertaking."

The picture is an attractive one in many ways. But New York has no hundred year old tradition and practise of regulating capital stock issues and rates in the way described. Nor does the record indicate that the people of this State desire to take over the ownership and operation of all the utilities of the state without a further attempt to make regulation, based on its own traditions and experience.

TESTIMONY OF PRESIDENT HADLEY, MR. RICHBERG, PROFESSOR WILLIS AND PROFESSOR WATKINS

Numerous other suggested modifications of the relation of valuation to rate making were submitted to the Investigating Commission, most of which break so completely with past experience and current judicial opinion that they afford no practical basis for present legislative action. Of these the proposals of President Arthur T. Hadley, Mr. Donald R. Richberg, Professor Henry Parker Willis and Professor Myron W. Watkins have been selected as particularly interesting and suggestive.

President Hadley denies that return on valuation, whether based on prudent investment, reproduction cost or any other theory, has anything to do with reasonableness of rates. He contends that the Fink-Adams theory of charging what the traffic will bear, which has been successfully applied in railroad rate making, can be applied to other public utilities. He holds further that the interests of the companies and the public are in the long run substantially identical; that monopolies have even more inducement to lower rates than competitive enterprises, because maximum net profits coincide with minimum rates and maximum progress; and finally that intelligent cooperation between the utilities and the public authorities on these cases will solve the problem (1484-1521). In theory, much could be said for the proposal, if superior intelligence and foresight were always to be found in company managements and public authority, and if the "long run" view always prevailed. It has been contended, however, that it would not have any practical application to the problem under consideration.

Mr. Richberg proposed a far-reaching reorganization going to the fundamental relations between public utilities and the government, and based upon his conviction that "private control of public business" threatens the very existence of democratic institutions. To meet the situation he recommends the elimination of all private proprietory capital from the industry; the provision of proprietory capital by the state; the appointment by the regulatory commission of a minority of the directors; the election of the majority of the directors by the contributors of private capital for fixed compensation, represented by bonds, notes and debentures; the designation of directors and managing officials as public agents; and the requirement that every public service enterprise shall be conducted by a single corporation which shall not engage in any other business.

As a preliminary or first step toward the realization of this permanent program, Mr. Richberg also proposed as a temporary measure that at least one public director be appointed on the board of every public utility corporation, that no public utility corporation be permitted to engage in any other business, and that secret means for influencing public officials by public opinion be prohibited (5119-5141, 5200-5230).

It appears that there is nothing in Mr. Richberg's analysis which would justify the continuation of "private ownership and operation as a matter of public policy," although he professed his belief in the desirability of this policy. If steps of the character are required, the results could be secured more simply and more directly by public ownership and operation.

Professor Willis also suggested the complete abandonment of regulation by valuation, and suggested that rates be based upon studies of "standard costs," with a guarantee by the State of a minimum return on investment of say 4 per cent., and the opportunity through furnishing service at a less cost than the "standard cost" to earn a maximum return on investment of say 7, 8 or 10 per cent.; this policy is to be supplemented by the reservation of authority to transfer an enterprise from one management or group to another if the guaranteed minimum return were not earned (5281-5287).

Professor Watkins made a somewhat similar suggestion, without developing it in as much detail, the basic principle of his proposal being that "regulation by commission should have as its ideal the closest possible approach to the regulation by competition which it supplants." In other words, rates should be based on computed competitive costs as it is estimated they would be if perfect, free competition existed (5304-5312).

Conclusion

Consideration of these proposals has led to the formulation of a plan that embodies certain features of several of the plans outlined above. One of the most important considerations is the need of gaining the voluntary cooperation of the companies. It is apparent that no system of governmental regulation of an industry, public utility or otherwise, can possibly succeed it if is simply *imposed* by governmental authority. For successful regulation, intelligent cooperation and leadership within the industry are requisite. It has been urged that in view of the attitude of several leaders of the public utility industry in New York State who have come to believe that regulation must be made really effective and successful, there is reason for confidence that voluntary cooperation with regard to this essential matter of determining values for rate making purposes can be brought about. A second feature that has been suggested as essential to a successful plan is that the figures determined upon should not hold permanently on the one hand nor should they be subject to frequent revision on the other. The former was urged by Dr. Bauer and the latter by Chairman Prendergast. With these suggestions before us, we may now turn to the consideration of a contract plan based upon a voluntary agreement and enduring for a period of ten or fifteen years.

STABILIZING VALUATIONS BY CONTRACT

The above discussion indicates (1) that valuations must be determined not alone on the basis of the economic values involved, but also with reference to the partnership rights of the public; and (2) that the process of fixing values must be simplified so that definite data are currently available, for all utilities. It is contended that if the first requirement is realized it means the banishment of the attitude of exploitation, of insistence upon the letter of the law, of secrecy and manipulation through involved corporate structures and it finally means that the enlightened utility leaders will cooperate toward the development of the second objective, namely a workable and feasible policy of fixing base values. Without such cooperation the plan outlined below will obviously fall short of accomplishment.

The following plan has been suggested: It is proposed that basic valuations and rate of return thereon shall be agreed upon between the Public Service Commission and representatives of all of the utilities operating in New York State; that such agreements shall

be written into contracts which are to be filed with the Legislature enduring for a period of ten or fifteen years; that at the conclusion of this period new agreements will be entered into for a second period and so on. By this plan new investments made during the preceding period might be added to the agreed upon valuations on the basis of actual costs or at a valuation agreed upon between the Public Service Commission and the company.

The proponents of this plan have recognized that the chief problem in the carrying out of this program centers about the valuation of existing properties. It is, however, contended that this may be approached with considerable confidence because of the widespread public dissatisfaction with present methods on the one hand and the fact that not a few utility managers are giving thought to the possible results of serious deflation on the other. It is further urged that the latter appreciate the difficulties and expenses involved in case the Public Service Commission should seriously attempt to vigorously attack the valuation process along the lines laid down by the courts.

Values of Existing Property

It has been suggested that legislation be enacted which would declare the policy of the State, as a guide to the commission, in its determination of a rate base. It has been urged that the Commission should consider primarily the establishment of a return on the capital actually contributed which will be sufficient to attract fresh capital to the enterprise, that in so doing, the Commission should give careful study to the entire financial structure of the company, and to the question whether or not the company has been efficiently managed and operated, and that attempts should be made to reward efficiency and thereby to provide incentive for progressive and economical management.

It has been suggested also that in connection with the foregoing the Commission should bear in mind the following considerations:

1. Original cost of construction.
2. Amount and market value of bonds and stock.
3. The estimated prospective earning capacity of the property at the proposed rate.
4. Cost of reproduction new less depreciation.
5. Sum required to meet operating expenses.
6. The necessity of making reservation out of income for surplus and contingencies, and
7. All facts which in the judgment of the Commission have any bearing upon a proper determination of the question.

The proponents of this plan have urged that if the companies and the Commission fail to agree, the Commission should proceed to determine a valuation and a rate thereon in accordance with the foregoing principle.

Those who favor the adoption of this plan contend that it would give to investors a liberal return upon the capital which they have contributed and on the other hand would assure the public

adequate service at reasonable rates in return for the special privileges and protection that have been conferred.

It has been pointed out that two of the principal features of evaluating property according to accepted methods are book costs and reproduction costs new. For the most part the book costs are readily available in the records of the Commission. It clearly appears from the testimony that the determination of reproduction costs for all of the utilities in the state is a stupendous task and, if the appraisals were to be made by the Commission and its staff, would require a considerable amount of both time and money. It has been suggested that each of the companies should be requested to prepare the appraisal for its own property. Since many of them already have in whole or part such data available the task would be greatly simplified and expedited by such cooperation. The Commission would then be responsible for reviewing the findings of the various companies by means of the spot-checking method. It has been estimated that this whole process might be carried through within the space of two years.

One phase of the valuation process is so important that it is deserving of special mention. That is the question as to the probable *future trends of price movements.* It has been suggested that if it could be predicted with any degree of certainty that prices would go either much higher or much lower, the level at which values should be stabilized for rate making purposes might be affected one way or the other.

Several authorities on price movements were invited to give their views on these and kindred matters. Professor Henry E. Riggs of the University of Michigan, Professor Irving Fisher of Yale University, Professor Wesley Mitchell and Professor Parker Willis of Columbia and Mr. Lyle H. Olson of the American Appraisal Company expressed their views as to the relationship between general price movements and the price changes for specific commodities, particularly such as are used in the utility industry, and as to the possibility of predicting price changes in the future.[1]

It was the unanimous opinion of these several witnesses that there was no close correlation between available price indices and the movements of specific commodities which enter into the construction of public utilities, excepting Dr. Fisher who considered that there was a close correspondence between the general price level and building costs.

As to the future trend of prices, both Professor Mitchell and Professor Fisher were of the opinion that there would be a decline, but both pointed to the possibility of new conditions that might make for stabilization. Professor Fisher was less optimistic of this because his prediction was based on the reduction of the gold reserve. He doubted somewhat whether the public could be educated to economize in the use of gold and whether new technological methods of extracting gold would offset the present drain on the reserves.

[1] Riggs, pp. 4011 ff.; Fisher, pp. 4464–4569; Olson, pp. 4725–4757; Willis, pp. 5262–5292; Mitchell, pp. 4590–4599.

When it came to specific commodities, Dr. Willis positively asserted that no prediction was possible, while Professor Mitchell was non-committal and Professor Fisher had no opinion. Only Mr. Olson ventured predictions on a number of materials and the probable rising costs of a number of essential materials and labor, all of which would enter into the construction of utility plants and equipment. On the future of and values only Dr. Mitchell was ready to forecast a probable rise in prices of urban land values.

The nature of the evidence summarized above is obviously conflicting, but on the whole indicates that the present level is neither at a high peak nor in a low valley.

Future Investments

The proponents of this plan urge that the following should be adopted as a guide to the Public Service Commission, but not binding upon it, in its consideration of the terms to be incorporated in the contract:

It is suggested that the method of handling future investments for valuation purposes during the period of the contract shall be on the basis of actual investment, subject to the customary approval of the Commission. If this policy is adopted the treatment of increases in the valuation figures would become a relatively simple matter of accounting procedure. Under this plan both the consumers and the investors would be taking a certain amount of risk in view of the possibility that there might be a sharp change either up or down in price levels. It is contended, however, that inasmuch as there seems to be no acceptable basis for predicting such changes and as the uncertainty is equally shared by both parties concerned, this risk would not appear to be unreasonable, and since the period of the contract is comparatively short, whatever injustice might result could be remedied before serious losses had been sustained. Finally, it is urged that the substitution of certainty for uncertainty in determining base values might well be looked upon as a means of compensating for other disadvantages.

In view of the above considerations it has been suggested that whatever investments or additions are made to fixed capital during the period of the contract shall be added dollar for dollar to the agreed upon valuation after the usual approval of the Public Service Commission.

It has further been suggested that, as a matter of practical procedure, it would be desirable to enter the initial valuation (including the agreed allowances for working capital and going value) in the fixed capital accounts of the operating company, and to establish supervision of accounts by the Commission which will assure that all additions will be added at the actual reasonable cost thereof, and that all retirements shall be credited at the initial valuation or the actual cost thereof, according as they were installed before or after the initial valuation date. It is suggested that similar supervision should be exercised over depreciation accounting and reserves, and all other reserves created through charges to operating expense accounts.

In order to avoid the necessity of too frequent changes in rates, it has been suggested that a rate adjustment reserve should be provided (such as has been used in service-at-cost contracts in various cities) with maximum and minimum balances prescribed at which rate adjustments downward or upward with the approval of the Commission, would be automatically required.

Those who favor the adoption of this plan point out that under these circumstances the fair value at any time during the contract period would represent the sum of the balances in the fixed capital accounts of the company, less the sum of the balances in the depreciation reserve, all other reserves to be created with the approval of the Commission by charges to operating expense account, and the rate adjustment reserve.

Periodic Revision of Valuations

This plan contemplates that at the conclusion of each contract period new agreements shall be entered into by the companies and the Public Service Commission, and that it would be the Commission's function to pursue the same policy as outlined above, that is, to propose a set of guiding principles in which marked changes of price levels would of course be given due weight, as well as any modification in determining valuations that may have been made in court decisions. The proponents of the plan believe that such proposals would serve as the point of departure for negotiations with the company representatives.

It has been urged that this program of renewable contracts for comparatively limited periods would pave the way for orderly procedure and definiteness where now there is uncertainty and confusion and a considerable lack of fundamental information; that it would result in the reduction, if not elimination, of rate cases; that it would free the Commission from one of its most arduous and thankless tasks and lessen the pressure upon the dockets of the already overburdened courts. It has been pointed out that there can be no real regulation worthy of the name unless the Commission has reliable and acceptable data on base values for all utilities coming under its jurisdiction and that if the companies wish to promote regulation, as it is clearly in their interest to do, they will appreciate the importance of reaching agreements on this phase of regulation and cooperate on a fair basis to that end.

II. Rate of Return

In the discussion of this topic, the material submitted by Dr. Bauer in support of his plan has been made use of in the development of the so-called Contract Plan.

Present rate procedure is unsatisfactory not alone in the treatment of valuation but also in the determination of the rate of return. Both quantities are variable, each dependent upon shifting conditions affecting the industry. One administrative problem with which the Commission is confronted is to determine a fair return for the various companies coming under its control. Perhaps the guiding principle in determining this fair rate is that it must be sufficiently high to attract capital for extensions and improvements of the service. In this case the status of the money market will necessarily affect the rate to be paid at one period or another. Another variable factor is as to the earning power and financial status of the company under investigation. Obviously these circumstances will affect its ability to market securities.

Another factor recently emphasized in the decision of the Supreme Court in *Baltimore Street Railway* case (January 6, 1930) is as to the returns yielded by similar industries in the same locality such as are incurring equal risk. Economists assert that there should be some relation between the earnings of the utilities and those of other industries in the same region and subject to similar risks. But as to whether this relationship is close is to be seriously questioned. The public utility is a highly privileged industry where the risks are almost negligible except in the case of street railways. It deals in services that are virtual necessities to most of the population. It is protected against competition to a large extent and is permitted to charge sufficient rates to earn fair returns. With such advantages it is difficult to see how fruitful comparisons may be set up with any private industry in the country.

A further consideration is as to the possibility of rewarding unusually efficient service by granting a higher rate of return than what would be considered the normal rate. In the words of Commissioner Evans, an efficiently managed company should be allowed a higher rate of return than an inefficiently manager one (4138). The possibility of varying the rate of return upwards or downwards for the purpose of rewarding unusual efficiency or penalizing the lack of it has been often suggested. Commissioner Atwill from Massachusetts also referred to this in describing the practice in Massachusetts. Some attention will be given to this last factor in a discussion of incentives and efficiency.

So far as the decisions of the New York State Commission are concerned, a review of the cases shows that there has been a preponderant tendency to permit an 8% return. It seems to be accepted among utility managers and generally in the public that eight per cent. is the settled policy of the New York Commission.[1] But all of the commissioners were agreed that no arbitrary percentage should be set. Mr. Van Namee (1099) went so far as to say that seven, or eight or even six per cent. might under certain circumstances be reasonable, adding: "It is hard to understand what the courts held, what they had in mind, because we had a decision of seven per cent. and a year or two ago, they said eight per cent." (1099). Commissioner Lunn expressed the opinion that as a rule a rate of seven per cent. should be more than ample

[1] See Mr. Manson's and Mr. Phillips' testimony; also the compilation of Miss Mary Dillon in the *Brooklyn Borough Gas* case. In view of the lowered money rates as compared with the war period and the general prosperity of the utilities it is questionable whether the 8% level is justifiable, except on the ground of peculiar conditions.

(1028). In the Baltimore case, decided January 6, 1930, it was held in the majority opinion that 6.26 per cent. was too low for the street railway company involved in that case, and that 7½ or 8 per cent, might be necessary to avoid confiscation.

At any rate it is as difficult to deduce guiding principles for determining the amount of a fair return from Supreme Court or Commission decisions. It may be that variations are practically mandatory under the holdings of the court and present-day conditions. However that may be, it is generally admitted that if possible a method should be devised for the fixation of the rate of return, at least over a period of time. It has been suggested that this might be done by voluntary agreement in connection with the contract plan of rate regulation already referred to under Valuation.

Rate of Return for Existing Properties

Proponents of this plan assert that for existing properties, it will be necessary to adopt after negotiation on a reasonable basis a definite rate of return. The most feasible course suggested would allow a single rate upon all the properties. It is said that seven per cent., for instance, would permit the payment of interest and preferred dividends, and allow a return of 8%, 9% or 10%, or even more, upon the common stock equities in the existing properties. The rate of return, in each instance, would have to be agreed upon by the management of the companies and the Commission.

Rate of Return for Future Investments

For future investments, it has been urged as both logical and fair to fix the rate of return in accordance with the actual cost of money as new capital is provided. If bonds or preferred stocks are issued, the rate of return would be automatically determined, through the issuance of the securities, by the price received from the purchaser.

It is pointed out that a company, to obtain funds, would, of course, be compelled to pay the market price of interest. The bonds issued under a given mortgage would carry a fixed rate upon the face value of the bonds. The market rate, however, would fluctuate from time to time with changing financial conditions. This variation would reflect itself in the price obtained upon the issuance of bonds. The higher the market interest rate, the lower the price of bonds; the lower the market rate, the higher the price of bonds. There would be an automatic adjustment and complete control of the rate of return, according to the actual cost of money to the company to provide funds for the public service, with proper allowance for the amortization of discount or premium, if any.

It is said that the bulk of the future investments would probably be made through the issuance of bonds and preferred stocks, just as in the past, and there would be no difficulty in keeping exact control of the rate of return on this portion of the capital upon a factural basis, provided proper allowance is made for the

effect of retirement of securities outstanding at the date of the initial valuation. There would be some difficulty encountered, however, to the extent that future investments are made through the issuance of common stock, or through the reinvestment of distributable earnings allowable under the contract. For this purpose, capital provided by reinvestment of distributable earnings should be considered on the same basis as that provided by the issue of common stock, and the contract should fix the agreed rate of return to be applied throughout the life of the contract to such equity capital.

The allowable annual return at any date during the life of the contract, then, would be determined by a formula which might consist of the fair rate of return times the sum of the balances of the accounts representing the initial valuation of the portion of the property included in the initial valuation and still remaining in the public service; plus the actual interest and preferred dividends on all bonds, notes, preferred stocks and other securities bearing fixed rates of interest or dividends issued after the date of initial valuation, with due allowance for amortization of discount and/or premiums; minus the actual interest and preferred dividends on all bonds, notes, preferred stocks and other securities bearing fixed rates of interest and/or dividends outstanding at the date of the initial valuation and subsequently retired; plus the product of the agreed rate of return on equity capital times the difference between the total fair value at such dividends rates used subsequent to the date of initial valuation, plus the stated value of securities bearing fixed interest and/or dividends rates used subsequent to the date of initial valuation, minus the stated value of the securities bearing fixed interest, and/or dividend rates outstanding at the date of initial valuation and subsequently retired.

In this way a definite basis can be established for the control of the rate of return upon common stock investments, as well as upon bonds and preferred stock. The rate of return and the rate base would then consist of definite quantities, and could be promptly administered through the machinery of rate making. Both would be based upon reasonable determination for all existing properties, and upon actual cost for all future investments, controlled through accounting records.

The system as thus outlined would provide for the future not only a definite rate base, but a definite rate of return. It would define precisely the rights of the investors and the obligations of the public. It would make impossible the confiscation of any private rights, and would assure that the returns expected would actually be provided through the rates paid by the consumers. There would be a complete safeguard of investments and full assurance that adequate capital would be provided for future expansion of the properties in accordance with public needs and business requirements.

The advocates of this plan assert that by the use of such definite valuations and rates of return, and adequate supervision of

accounts, the relation of actual net income to allowable net income could be definitely determined from the annual reports filed with the Commission, and by adoption of the device of a rate adjustment reserve, as previously referred to under Valuation, the determination of the general level of rates and general rate adjustments could be made nearly automatic.

III. Incentives for Efficiency

Under the present program of regulation no special incentive is provided for a utility which practices economies and develops efficiencies in its operation. The general plan has been to determine the valuation, to decide upon a rate of return and then to give the utility that return after all operating expenses have been paid. As pointed out in the section on Rate of Return the standard rate of eight per cent. has been rather generally accepted. Chairman Prendergast stated to the Investigating Commission however that if the Commission found a company so inefficient as to adversely affect the operating expenses, that company would be penalized (905). He believed that the Commission had that power under the law.

The utility men complain, so Chairman Prendergast indicated, that rigid regulation and strict scrutiny of return take away from them savings which come from economies and efficiencies (913). He added on the other hand that it was impossible to make comparison of companies because conditions were so varied that these comparisons would have little meaning (907).

His proposal was that a reward for economy and efficiency in the form of a higher return might be provided when the company had made sufficient savings so as to reduce rates. In other words, the result of economy and efficiency should be divided between the company and the consumer. In this way the company would be encouraged to make greater savings in order to increase profits.

It should of course be borne in mind that economy and efficiency are due to the effort of the operating and managerial executives, who should share, through increased salaries, in the results of their work, along with the consumers and with the stockholders who have been responsible for providing an efficient organization.

If this situation be accepted, a question is immediately raised as to the measure of excellence of operation. Reductions in costs of operation are not the only criterion which should be accepted, and in fact may result from conditions in no way connected with efficiency of management.

Prof. Livingston of Columbia University suggested five criteria to be used (4957):

1. Lowness of rate.
2. Continuity of service.
3. Security of service.
4. Excellence of public relations.
5. Qualifications and training of employees, and reasonableness of employees' compensation.

Prof. Livingston has also referred to the possible use of a variable allowance for going value as a means of rewarding special accomplishment in these directions by a utility company. It is clear that much study would be required before any set of criteria of this character could be standardized and applied with reasonable precision and with fairness to all concerned, and before the most effective plan of apportioning the benefits of efficiency between the stockholders, the consumers and the management could be devised. Nevertheless, the desirability of recognizing and rewarding efficiency by some form of incentive to a regulated industry cannot be denied. It is believed that this subject should receive special consideration and study by the proposed Research Bureau, in order that progress may be made toward this end. Finally, it may be pointed out that as regulation more effectively regulates and limits earnings to a fair return the incentive problem will become increasingly important.

IV. Regulation of Rates

Introduction

The following summary is from a memorandum prepared by Dr. Mosher as a result of his study of the testimony on this subject.

In discussing the regulation of rates, Chairman Prendergast made the following general observation: "I believe that the rates we have very closely approximated, closely approximated, rates that would be determined by the most exact methods that could be employed" (538). (This statement is disputed.) In view of the array of rate structures and rate schedules now in force in New York State, of the lack of essential information as to rate base and, generally, in view of the limited amount of attention given to investigation and research, so necessary in the proper supervision of rates.

Rate determinations should follow for the most part precise methods and deal with accurate and reviewable data. According to fixed practice, rates shall produce sufficient revenue to cover operating expenses with proper provision for depreciation and other reserves, taxes, and a fair return on the fair value of the properties, together with other incidental expenses that are properly chargeable to operation. These items either may or should be expressed in definite figures but as a matter of fact, as will be pointed out later, the system of accounts does not produce the detailed information desirable as is indicated in a subsequent section. The Commission has for most companies a basic valuation figure for computing rates which the latter do not accept and the former cannot insist on.

It would be difficult to explain the rate situation in both electricity and gas without appealing to history and tradition. Rate reductions seem to have come through a whittling process and date back to the time when electricity was used solely for lighting at night, rather than through a clear-cut policy that is supported by factual data.

In the words of Mr. Tallman, the rate expert of the Rockland Light & Power Company:

> "Owing to the fact though that we have all these, what you might call legacies that have come down through the industry for years, of obsolete types of rates, it is practical to eliminate those only gradually and to get more modern types of rates, load factor rates, into effect, unless you want to upset the equilibrium not only of the company's earnings but the equilibrium of the entire communities. . . . "The existing schedule of rates has perhaps grown up with the industry. . . . They are not scientific" (4654 and 4659).

One of the most challenging problems before any Public Service Commission, is the problem of rate reductions and the introduction of promotional rates for domestic consumers. The utility companies have been slow to appreciate the possibilities of the household market. They have shown only a minimum of the sales initiative with domestic consumers that has been apparent with industrial and commercial ones. In view of the origin and purpose of the Commission, it has peculiar responsibility to make cheap electricity available to domestic users, small and large. This means something approaching a revolution in the policy of rate control.

The various phases of the rate structures and rate schedules will now be considered in some detail.

I. Rate Structures—Electricity

The following comment on the rate structures in New York State has been made by John L. Haley of the New York Power & Light Corporation, Chairman of the Commercial Section of the Empire State Gas & Electric Association. He summarized his conclusions on this subject in 1928 as follows: "The majority of rate forms still in effect throughout New York State are the relics of the earliest days of the industry when the only use of service by their customers was for light."[1] In spite of the recent interest of the companies to experiment with new forms, the tendency has been not towards simplicity and uniformity but rather in the opposite direction. In the words of Chairman Prendergast: "The fact is that the last couple of years has witnessed a very decided change or rather I would not say it was a change so much, but a propensity to adopt what are more complicated schedules, schedules of three or four parts. They are confusing to the people that have to use them" (541).

This observation is borne out by a review of the rates in force in thirty of the principal cities in New York State excluding New York City, as reported in the National Electric Light Association Rate Book of 1929. It appeared that nine different schedules were in effect in these thirty cities ranging from the old-fashioned

[1] *Electrical World*, Volume 92, 1928, p. 791.

straight line meter rate to the most complicated "Block Hopkinson demand with Wright demand energy" rate. In nine of the thirty cases residential and commercial lighting were treated under the same formula. In thirteen cities the block meter rate appeared with a large number of kilowatt hours in the first block for most of these schedules. In these cases, the first block included eighty or more kilowatt hours and in several cases reached the figure of 200. Inasmuch as the average usage of small consumers is less than fifty kilowatt hours per month, it is clear that in nearly half the cases, one has to do with what amounts to a straight line rate. In two cities the straight line rate is still in effect. This structure cannot be justified from the point of view of fairness to large bodies of consumers nor from the point of view of stimulating them to use more and more electricity.

Fault has been found with the statement of Chairman Prendergast (540), that "It is only within the comparatively recent past that the necessity for this studying rates as to 'reasonableness and satisfactoriness' manifested itself," and it has been contended that the rate form should have been subjected long since to a searching investigation on the part of the Public Service Commission. The Commission on its own initiative instituted proceedings in December, 1928, looking toward a uniform schedule for gas and electric companies. So far as could be learned little progress had been made on account of the pressure of other obligations. The prosecution of an investigation in this direction is of the utmost importance and has been suggested as one of the first tasks to be assigned to the proposed Research Division in the Commission.

Promotional Rates

It is only recently that the leaders of the industry have begun to introduce what is called promotional rates. They have been defined as follows: "A rate which by its form encourages the use of additional quantities of service by reducing the charges for such additional use consistent with the cost of supplying the service. Such a rate should not only encourage long hours of use or improved load factor on existing loads, but stimulate new applications and additional loads."

Promotional rates are made possible by establishing an initial charge which covers the following expense:

1. Promotion, commercial and other operating expenses which the company incurs for each customer and which may be arranged for the customers of any given class, such as the residence group.
2. Fixed charges which are created by the additional investment made by the company to supply the service demanded by the size of the customer's individual load.

If the promotional rates do not include these elements of cost as a service charge, the charges per kilowatt hour for initial use will be relatively higher.

The underlying idea of promotional rates is that large sales at low unit prices increase the revenues of the companies and

prove to be, as in the marketing of other commodities, a sound business policy as well as a sound social policy. A limited number of companies in New York State have shown progressiveness in the adoption of a promotional rate system. The results in two districts are shown in a study prepared by Mr. Charles S. Ruffner of the Mohawk Hudson Power Corporation (Exhibit 203). From a table in the Appendix it appears that the average kilowatt hour usage per customer jumped in 1921, under the old rate form, to 1929, under the new rate form, from 194 to 428 kilowatt hours per year per customer. The cost per kilowatt hour dropped from 13.3c. to 8c. The number of customers was almost doubled and the number of kilowatt hours sold was quadrupled. Finally the revenue was more than doubled, having increased by 141 per cent. The experience of the Ontario Hydro Commission with reference to the adoption of promotional rate schemes covers a large number of customers and a very extensive area. According to summary tables in the annual reports the results are even more astonishing.

In New York State the companies have been slow to pursue this policy and the Commission has been criticised for failure to assume vigorous leadership through which the companies might be stimulated to adopt a rate scheme that is clearly in the public interest. More thoughtful leaders in the utilities have pointed out that the aggressive sales policy which in the past has been adopted with reference to large consumers should be applied to domestic consumers, that this is a field which it will pay to cultivate. There is no doubt but that the most challenging problem of rate regulation is encountered in connection with residential usage. It is said that the possibilities for improving the load factor through low rates and diversified use have hardly been sounded in this state. The policy pursued in Ontario has been pointed to and it has been said that there, where the Hydro Commission had no such opportunity to improve load factors by means of industrial usage as is the case in New York State, they have through the stimulation of domestic usage gradually brought about a satisfactory load factor.

COAL SURCHARGE

Considerable evidence was introduced attacking the coal surcharge that was imposed by the New York Edison Company with the approval of the Commission, in November, 1920 (5473). It was charged by Mr. Harned of the Community Councils of the City of New York that the advance netted the company at least $29,000,000 by reason of the circumstance that the amount charged was not proportionate to the actual increased cost of coal (2699). Much emphasis was placed here upon the fact that the amount of coal used for the production of a kilowatt hour had been reduced over a period of years from 2.33 lbs. in 1920 to 1.52 lbs, in 1927 (2700). The improved utilization of coal was taken into account in estimating the financial gains that, according to Mr. Harned, accrued to the company under the coal surcharge.

In his testimony on this criticism, Mr. Sloan pointed out first that the coal surcharge had been eliminated for the small consumer on October 1, 1928. He explained further that the coal surcharge was imposed not alone because of the higher price of coal during and after the war, but also because of the higher price of labor and other materials. It was considered that the fluctuations in coal prices bore a rather close relationship to the fluctuation in the prices of other materials entering into the generation of electricity. In other words, the changes in coal prices were used as a rough index to changes in other prices. Accordingly, even though through technological advances a pound of coal might produce a larger amount of electricity than previously, marked fluctuations in prices not alone for coal but for other commodities and labor might still be indicated by the changes in coal prices. Even though it may be granted that Mr. Sloan's argument carries weight, it is doubtful whether the price of electricity should have been measured by what is at best a rough and ready index. A proper system of cost accounting should enable both the management of an electrical company and the Commission to determine operating expenses in such a way that increased costs, which necessarily would be reflected in operating expenses, should in turn be passed on to the consumer in the form of higher charges per kilowatt hour. It would seem as though this were a proper subject for investigation both by the Commission and the electric companies so that this more or less arbitrary measurement of increased cost of production might be permanently done away with, except possibly in the case of consumers who purchase large quantities of current at so low a price that changes in the cost of coal would absorb most of the profit.

Rate Structure—Gas

There are fewer rate forms for gas than for electric service. The rate forms are naturally grouped into four divisions, namely residential, commercial, industrial and space heating, the latter covering service for residential heating.

Most of the rate forms for residential service in New York State are the so-called block systems. However, in most of the cases the first block is so large that it is rarely exceeded by the ordinary domestic consumer so that in effect the rate becomes a straight line charge.

From a theoretical standpoint, it is said that the proper rate for gas would include a charge for customer cost, plus demand cost, plus commodity cost. This rate could be simplified by grouping the first two charges as a single fixed charge and then adding the commodity charge based upon quantity of gas used. There seems to be, however, a practical difficulty which prevents the adoption of such a rate form. There are unquestionably a large number of small consumers at the present time who are being served at less than cost, the difference being made up by excess charges for other types of consumers.

It is argued that a sound rate structure should be arranged to include the above items—the sum making the total cost—as follows:

1. A customer charge per meter per month.
2. A demand charge per cubic foot of maximum hourly demand per month.
3. A commodity charge per 1,000 cubic feet of gas sold.

This rate can be simplified by grouping the first two charges with a single fixed charge and adding the commodity charge as before. Such a policy has been generally adopted both for gas and electricity. The principle of a two or three charge rate is sound and it is possible that in time the public will recognize the justice of this form of rate and not object to it.

The companies dealing in gas have been criticized on the whole as much less progressive than those dealing in electricity. Reference has been made to the system of charges for the first block of gas as reported in Brown's Directory, 1929 edition. Again covering the important New York State cities with the exception of New York, it appears that five of the eighteen cities reporting have in their first block anywhere from 5 to 25,000 feet of gas. Critics declare that it is quite illogical to charge a customer consuming from 500 to 1,000 feet at the same rate as one consuming several thousand. This runs directly counter to the principle of the promotional rate. In view of the fact that the demand feature is much less important in a commodity that may be stored like gas than in one that may not be stored like electricity, it would seem as though a more progressive form of rate might easily be encouraged than the block system scheme where the first block involves several thousand feet. Here too is a fruitful field for investigation and stimulation on the part of the Public Service Commission. It is asserted that the gas industry has apparently taken full advantage of the fact that it is a protected industry and the regulatory body has been satisfied to entrust to the utility managers the task of making any advances that are made.

Service Charge

The service charge is prohibited under Chapter 49, Section 65, subdivision 6 of the law for gas. There is no such prohibition for electricity, although frequent efforts have been made both in New York and elsewhere to bring this about. The chief reason for the opposition to the service charge is that the consumer believes that he is paying for something which he does not receive. This attitude is due to ignorance and can be modified by proper education and publicity.

The following definition has been given of the service charge by Mr. Tallman, the representative of the Rockland Light & Power Company: "A charge to cover a true service charge should cover all costs incidental to the readiness of the company to serve the customer, not only operating cost but fixed cost elements, interest, depreciation and taxes, on whatever is available for the customer's use" (4668).

The testimony before the Public Service Commission in the *Brooklyn Borough* and *Brooklyn Union Gas* cases goes to prove the futility of prohibiting a service charge as is now done in the law. Such prohibition leads to a considerable amount of argument, if not quibbling, concerning an indisputable fact, viz., that readiness to supply service involves expense in the interest of the consumer and that the consumer in one form or another must meet this expense.

It is therefore suggested as advisable: (1) to eliminate Section 65, subdivision 6 of Chapter 49 which prohibits the service charge for gas and (2) to make thorough-going analyses and allocations of costs that properly enter into the equipment, investment and services involved in the company's readiness to serve. The amount arrived at would constitute the first rung of the rate ladder.

Segregation of Electrical and Gas Services

One other point regarding rates is worthy of comment. Chairman Prendergast testified (610) that where a company was engaged in both the gas and electric business, if the gas business were unprofitable, the Commission could not but be affected, in passing upon electric rates, by the general financial condition of the company, taken as a whole. Such a practice might readily be discriminatory against electric consumers, who are identical with the gas consumers, even though many may use both services, as Chairman Prendergast stated. It is suggested that consideration be given to amending the law so as to provide that where a company is engaged in two different public services, rates for each shall be regulated separately, with proper apportionment of joint capital and expenses, and without regard in each case for the financial results of the other service.

II. Rate Schedules

Chairman Prendergast pointed out that the most desirable method of bringing about rate reductions was the method of negotiation. The shortcomings of this method have already been commented upon. It is our purpose at this point to refer to the use of negotiations in connection with a survey made under the direction of the Commission by Mr. Fitzpatrick in the spring of 1929 (Exhibits A, B, C, D, and E). It is to be explicitly emphasized that Mr. Fitzpatrick's computations were based upon the book costs already accumulated in the records of the Commission and a certain allowance for working capital and taxes. They did not aim in any way to be an accurate measurement of the rate of return earned by the company on the basis of these figures in 1928. They were to serve simply as a means of negotiation. Chairman Prendergast's account of his negotiations with Mr. Phillips of the Long Island Lighting Company is enlightening (616). According to the Fitzpatrick memorandum the Long

Island Lighting Company was earning 16.83% on the book costs with the allowances indicated. We have on the one hand Mr. Phillips, fairly well, if not thoroughly, informed concerning the values which in his judgment must enter into the rate base and well aware as to how far he might go without cutting unduly into the company's profits, and, on the other, Chairman Prendergast fortified with book costs and general information and judgment as to values and rates. Mr. Phillips protested according to the witness that the "companies had gone as far as they could in the matter of rate reduction pointing out at the same time that the company had granted several reductions in recent years."[1]

As to whether the reductions offered by the Long Island Lighting Company would net more or less than the return to which they are entitled, there can obviously be no definite opinion without information on the rate base. To arrive at such an understanding is a laborious and time-consuming procedure and one which is customarily avoided by both the companies, the Commission and any group of consumers. Negotiations became therefore a type of bargaining in which most of the advantages are with the companies because most of the information lies on the side of the company representatives.

In spite of these handicaps and the protests that were raised by company representatives at Mr. Fitzpatrick's procedure, his compilations resulted, nevertheless, in rate reductions of a more or less material nature with twenty-three companies.

This was the first time that such a comprehensive review of rates of return for electric and gas companies was ever made (Lunn, 1010 and 1017).

Referring again to the success of the majority of the groups of twenty-five or more consumers who filed formal complaints with the Commission and also with the success of the Utica consumers who brought an annual saving of 220,000 to the Utica lighting customers, it would almost seem as though when pressure is exerted upon the utility companies the chance for reductions is much more favorable than not. Another illustration of the point of view that the method of rate control is far from scientific may be found in the testimony of Mr. Sloan who states that there had been no change in the maximum rate to domestic consumers for the past thirteen years except through the imposition and later withdrawal of the coal surcharge. The figure has consistently been 7c per kilowatt hour for this whole period. In view of the increased efficiency in utilization of coal, in view of the increasing density of the population using electricity, it would appear strange that a rate that was fair thirteen years ago under very different conditions would be fair today. Again Chairman Prendergast indicated that as soon as the New York electric rate case was settled, a case incidentally that has been before the Commission

[1] In spite of this protest the Long Island Lighting Company put in force a series of drastic rate reductions on February 1, 1930. See N. Y. *Times*, January 20, 1930.

for five years, very marked changes would take place in the New York city rates. Again the question is suggested as to whether injustices either are not or have not been done to the consumers in New York City in case there is ground for a thorough-going modification of the rates now in force which will result in reductions.

Within recent years there has been a marked decrease in the average cost of producing electrical current as well as of distributing it. In support of the first statement, reference may be made to the improved methods of utilizing coal (2700 and 2701). As to the second, we may point to the economics realized through the development of a centralized system of control with its attendant network system of transmission. As is well known this has resulted in important savings. Small, inefficient plants have been either abandoned, scrapped or used for emergency purposes. Holding companies have greatly improved the financial standing of local companies so that money may be procured at lower rates. More expert staffs through the holding company organizations have been made available for supervisory, advisory and other services.

As a consequence of these conditions, the cost of producing and delivering a kilowatt hour in extensive areas of the state has undergone very marked reductions. There can be little doubt but that these savings have been capitalized by the holding companies and that they go far toward explaining the striking increases in stock value of the utilities. These changes call for an entirely different type of regulation than has been customary under the scheme of localized production and distribution. The accounting and engineering problems have become increasingly complex and involved. If the Commission is to determine that the consumers are sharing properly in the savings due to the changes just outlined, far-reaching changes must be made in methods of control and material increases must be made in staff.

How complex the problem of rate determination is under a comprehensive and unified system involving several localities, was brought out in the hearings on the Madison rate case (Commission cases 4804, 4805, 4806). The difficulties of allocating costs to the three towns involved are clearly demonstrated. With larger units comprising a considerable number of industrial communities the problem becomes of course much more intricate. Not having the force to make detailed cost analyses and allocations, the Commission again is thrown back on the process of negotiations which finds its mainstay in the good-will combined with the self-interest of the utility companies.

Rate Levels for Different Classes of Consumers

Referring to the section on accounting procedure, it must be pointed out that there have been few, if any, studies made concerning the relative rates charged to different classes of consumers. It has been repeatedly maintained that the rates to industrial users

of electricity will necessarily be determined by competitive conditions. In fact, Mr. Carlisle went so far as to say that 87% of the electricity supplied by the Niagara Hudson Company was supplied under competitive conditions and that, therefore, the regulatory task of the Commission was necessarily limited to the domestic consumers (3586). It is maintained that this position is untenable. For instance, conditions may well arise which would make it uneconomical for a company to make a contract with a large industrial user either because of the limited profit or because of the adverse influence upon the load factor.

Secondly, there is a considerable percentage of commercial lighting and small industrial consumption where the danger of competition does not seriously come into play except in a theoretical way. There are many small industrial users who might conceivably install a private plant in case they cannot get as low a rate as they would like, but who would prefer to pay a somewhat higher rate for the convenience of securing electricity by simply turning on the switch. It is probable that in view of the electro-chemical and other large 24-hour plants in Niagara Falls, the percentage of competitive industrial usage in the Niagara Hudson Company is higher than in most companies, but it is improbable that in the average community 50% of the electricity is sold under what might fairly be termed competitive conditions. Furthermore, it is questionable whether a conscientious Public Service Commission could or would agree that it made no difference what rates were charged competitive industrial users. Questions of demand and local factor would necessarily have to be taken into account. But some control should be exercised over the rates which are charged all types of users for the purpose of determining that no class of consumer carry an unduly heavy part of the cost. The only sound basis for setting up a proper rate schedule is on the basis of costs. This calls for a type of cost accounting which involves generation, distribution costs and the allocation of overheads to various classes of consumers with which only a limited amount of experimentation has been done. It is believed that this is a proper and an important task for the research and accounting divisions, as proposed elsewhere in this report.

Even with a workable scheme for fixing valuations, returns and the general level of rates, the Commission is under obligation to make investigations on its own authority and to assume positive leadership for the purpose of making rates to different groups of consumers much more definite measurements of service than they are today and for the purpose of bringing about a much more liberal use of gas and electricity among domestic consumers as an important means of improving the economic and social conditions in the households of the country.

REPARATIONS

Testimony was presented to the effect that there is no provision in the present law affording a shipper opportunity to secure reparation or redress by refund of excess rates paid by him, where

such rates have been found to be unreasonable or discriminatory by the Public Service Commission. The Public Service Commission Law only prohibits the collection of unreasonable or discriminatory charges after the date as of which they are found, and gives the Commission no power whatever with respect to reparations (*Murphy* v. *New York Central Railroad,* 225 N. Y. 548). The payment of refunds is therefore entirely in the discretion of the railroad companies, which, however, customarily apply to the Commission for permission to pay refunds in particular cases where they desire to do so, in order to avoid the possibility of being held to have engaged in discrimination.

It has been suggested that the law be amended so as to include provisions similar to those of the Interstate Commerce Act, so as to make a railroad liable for excess rates collected by it within two years, and to authorize the Commission, on application of any shipper, to order refund of such excess rates collected within two years—with the option on the part of the shipper to sue for reparation in the courts, in which case the order finding the rate unreasonable or discriminating would be *prima facie* evidence of this fact.

Various witnesses have urged that some reasonable procedure to enable recovery of reparations for payment of unreasonable or discriminatory rates be adopted, and that the law is equally deficient with respect to electric, gas, steam, telephone and telegraph corporations as it is with respect to steam railroads. Furthermore, where rate payments are matters of record, as they are in most cases, it might be reasonable to authorize the Commission, when determining a rate to be unreasonable or discriminatory, to issue a reparations order requiring the repayment of all excess rates collected within a reasonable period from all shippers or consumers of record, who are still taking service and have done so continuously throughout such reparations period. Provision might also be made for public advertisement of reparations due other shippers or consumers, for payment on application and proper identification and proof, and for final discharge of all remaining liability for reparations after a reasonable period of time, and after full compliance with the requirements of the law to the satisfaction of the Commission.

SUBMETERING

In the course of the investigation the submetering situation as it has developed in New York City and is gradually spreading to other municipalities, was presented as a problem of importance. The representatives of the landlords and submetering companies submitted a large amount of carefully prepared evidence and opinion on this subject and Mr. Sloan, speaking for the New York Edison Company, gave special attention to it.

Fundamentally the problem of submetering undoubtedly arises from the spreads between the wholesale and retail rates, as the landlords would assuredly not be interested in reselling current unless it proved to be profitable, enabling them not only to meet

the expense of metering, billing, etc., but in addition to secure a surplus. It was suggested by Mr. Sloan, who was opposed to submetering by landlords (5506), that his company would be able to reduce rates by the amount of $14,000,000.00 if it were abolished. Although this amount itself may be looked upon only as a rough estimate it indicates that considerable profits may be realized by those engaged in submetering. The problem is complicated by the fact that the New York Edison Company until recently has carried on a vigorous sales campaign with companies engaged in the construction of large apartment houses and office buildings[1] (Dudley 2234). As a result of this campaign, many buildings companies and individuals did not install private plants and would today be physically unable to do so or could do so only at a great expense. Various individuals indicated that profits from submetering to tenants had entered into the financial and capital programs of many builders and real estate owners. The question was thus raised as to whether the New York Edison Company might not be under serious obligations to such owners in case drastic revision in the distribution of electricity to landlords were made.

These are important considerations, but the fundamental problem in the submetering situation is as to whether public regulation on the basis of a fair return on a fair value can permit of such a profit as is apparently being earned by a considerable group of distributors of this public utility. The deduction has been drawn from a recent decision in the Supreme Court of New Jersey (No. 228, May Term 1929) that landlords may submeter current if "they perform such functions without contract either with a public utility or the commodity sold by such public utility." It has been contended that such reasoning would lead to the conclusion that if they do handle the commodity sold by a public utility they themselves become a part of the distributing system and are therefore a public utility in the performance of this function. In line with this argument the Public Service Commission of eight states forbid the landlords to submeter while in five it is permitted and in two of the five the Commissions indicate that they would consider them a public utility and thus make them subject to commission control.

It is asserted that logically landlords engaged in submetering are a part of the distributing system and as such should not be permitted to earn more than a fair return on their investment. In view of the profits realized the consistent application of this principle would doubtless result in the reduction of rates to tenants in submetering buildings. Such reduction raises the question as to whether there would then not be discrimination as between tenants in a submetered building and in a building where the tenants purchase directly from the electrical company. This

[1] This testimony was in the hands of the officials of the Edison Company several weeks before their representative appeared before this Commission. It was not questioned by Mr. Sloan. But in response to a direct inquiry he replied that he personally knew nothing of the former policy (5518).

leads to the deduction that there are two classes of lighting consumers that might be called the average and preferred classes. According to Mr. Sloan, the preferred class, *i. e.*, consumers in buildings operating a submetering business, constitutes the cream of the business (5506). As a matter of fact the rates are determined today not with reference to the preferred but to the average class, that is the less lucrative class, while both according to established practice pay the same rates. If such an analysis is correct and the present conditions continue, there are those who assert that the logic of Commission regulation would require the recognition of these two classes and the establishment of lower rates to the preferred class. It may be pointed out that such discrimination between classes is formed under the present rate system, both in industrial and commercial consumption.

It is recognized that the adoption of such a policy would entail a large burden of work for the Commission and involve as well a more discriminating system of cost accounting than has yet been developed. The reasoning so far is based on the unquestionable fact that there is so great a spread between the wholesale and retail rates, that it is possible for interested parties to realize a large profit upon what may be called the service of the middleman in the handling of electricity, and furthermore, that this is opposed to the whole scheme of regulation, which is predicted upon the policy that in the generation and distribution of electricity, profits shall be limited to a fair return on a fair value.

One alternative to the above suggestion is the proposal of Mr. Sloan. It entails the elimination of the submetering industry, by requiring that those engaged in submetering shall secure from the Public Service Commission certificates of convenience and necessity. It is assumed that the purpost of this proposal is to have the Commission do away with submetering, by refusing to grant such certificates on the ground that the New York Edison Company has monopolistic privileges in the distribution of electricity. It is evident that before any such policy is adopted, due consideration must be given to the landlords' position that this would result in destruction of property and seriously affect their financial status.

Certain questions are thus raised which are difficult of solution:

1) Are those engaged in submetering in fact public utilities, or in fact so affected by a public interest that they should, accordingly, be regulated with reference to the principles of a fair return on a fair value, involving as it would rate adjustments in the bases of investment and operating expenses?

2) If, through the requirement of certificates of convenience and necessity from those engaged in submetering, their business is ultimately done away with, what consideration should be given to the problem of making suitable adjustment by the electrical corporation, so that they are properly reimbursed for their losses?

These involve a serious question of legal rights and of public policy and they are hardly questions for this Commission to decide.

However, the proposals made by Mr. Peter Grimm, president of the Real Estate Board of New York, providing (1) that submetering companies should be prohibited under the law from charging more than the going rates set for like service by the local electrical company; (2) that the legal rate of interest should be paid upon deposits of consumers; (3) that electrical meters should be subject to the inspection of the Public Service Commission, are desirable from the point of view of public interest, if the present situation continues.

ACCOUNTING CONTROL

To Mr. Scharff of Dr. Mosher's Research Staff I am indeted for the preparation of this subject.

The various witnesses (Prendergast 577, 918, 922, 948, 988; Keaney 2464 ff.; Fitzpatrick 3177 ff.) before this Commission have set forth the provisions of the Public Service Commission Act relating to the provisions and classifications of accounts. They also explained in detail the annual report forms prescribed to carry out the purposes of the statute, the use of these accounts in valuation rate and security cases, and the methods employed by the Public Service Commission staff in office check and field audits of annual reports and accounts.

Criticisms and suggestions as to the adequacy of the procedure actually followed by the Commission under its statutory authority were made by several witnesses (Cooke 4048 ff.; Dickerman 4923, 4955). Even with these criticisms it was developed that the accounting procedure and forms of the New York Commission are among the best of the various states regulating the accounts of utilities.

From all of this testimony there is one striking impression. That is that accounting control is of vital importance to effective regulation. It was made clearly evident during these hearings that once a valuation is established, thereafter if a question of rates is raised, such valuation may be used with adjustment for net changes in fixed capital, as a basis for a preliminary inquiry into the reasonableness of the net earnings being received. This of course will apply only over a reasonable period of time and in the absence of extreme variations in price level. Such control will constitute the very essence of rate regulation if, as is elsewhere discussed, there should be devised by some form of contract or otherwise, a stabilized rate base or valuation. Even if the valuation is not stabilized, the accounts constitute the only record of major facts upon which the Commission may base its conclusions in security, merger, consolidation and stock acquisition cases.

From an examination of the testimony on this subject, it is believed that this Commission will find that in the regulation of public utilities it is essential,

First, that accounting records shall be prescribed which will record in suitable form all of the facts required by the Commission for the exercise of its regulatory powers;

Second, that the Commission shall be fully advised by periodic reports and field audits, as to whether such records are actually being kept in accordance with the requirements; and

Third, that such records, when so kept, shall be utilized by the Commission to the fullest possible extent in the performance of its duties.

Attention has been called to the fact that the most effective instrument the Commission has for accounting control is the power "after hearing to prescribe by order the accounts to which particular outlays and receipts shall be entered, charged or credited." It has been suggested that this power would be made more effective and would no doubt be utilized more frequently, if amendments were added placing the burden of proof on the company in every such proceeding and specifically authorizing the Commission to suspend any such charge or credit pending submission of such proof.

Later herein I shall make reference to added control over depreciation accounts of operating companies, and in a separate section to the proposed jurisdiction over the accounts of holding companies.

ANNUAL REPORTS

Many of the suggestions made relative to the improvement of the present forms for annual reports, refer to matters that should be considered by the Public Service Commission itself rather than matters requiring legislative action. There is one exception, however. That is the recommendation made by Chairman Prendergast (445). He would require the disclosure in annual reports of the personal identity of the beneficial owners of stock of a utility company held by trustees or other intermediaries, and the filing of copies of trust agreements under which such stock is held.

It needs no elaboration of argument to point out that it might well be in the public interest in considering transactions between operating companies and holding or affiliated service companies to know actually the identity of the persons owning directly or indirectly substantial interests in the stocks of those companies. Perhaps, as was suggested, the Commission itself through modification of its present annual report forms, might secure a portion of the information.

To define clearly the authority of the Commission relative to this subject and to extend its authority as far as is necessary for

this purpose over the holders of substantial interests in utility companies, the following is submitted for consideration by this Commission that Sections 46, 66 (Subd. 6), 80 (Subd. 5), and 95 (Subd. 1), be amended to provide:

(1) That all annual reports shall state in addition to the information already required, the names and addresses of, and the number of shares held by each holder of one per cent. or more of the voting stock of the reporting company;

(2) That where such stock is held by a trustee or trustees or other intermediate agency for the beneficial interest of an owner or owners other than the holder, or by a corporation, such annual report shall state the names and addresses and respective interests of such beneficial owners, and the names and addresses of the officers and directors and of each stockholder holding one per cent. or more of the voting stock of such stockholding corporation, if such information is available from the records of the reporting company;

(3) That where such information is not available from the records of the reporting company, every such holder of one per cent. or more of the voting stock of such reporting company shall be required, when directed by the Commission, to file a sworn statement upon such form and within such time as may be prescribed by the Commission, setting forth whether or not any of the stock so held is for the beneficial ownership of any person, firm or corporation other than the holder thereof; the names and addresses and respective interests of such beneficial owners; if a trustee, submitting a certified copy of the trust agreement under which such stock is held; and if a corporation stating the names, addresses and stockholdings of the officers and directors and of all stockholders holding one per cent, or more of the voting stock of such stockholding corporation;

(4) That the same provisions shall apply to successive owners of beneficial interests or of stockholders in any chain of ownership of control, to the end that the Commission may require the complete disclosure of the natural persons, firms or corporations, and their respective interests, who own or control directly or indirectly, one per cent. or more of the voting stock of any company required by law to submit an annual report to the Public Service Commission.

FIELD AUDITS

It appeared from the testimony that office checks are made of all annual reports submitted to the Commission. Discrepancies are dealt with by correspondence with the various companies. Several witnesses stressed the necessity of more extensive field audits of both the operating expense and the fixed capital accounts of operating companies (Cooke 4082; Keaney 2495). At present, field audits are in effect restricted to examination of fixed capital

when required by capitalization cases, and examination of operating expense accounts when required by rate cases (Fitzpatrick 3176, 3182; Keaney 2465, 2467). That this is one of the weak points in existing State regulation was pointed out by the Federal Power Commission in its fifth annual report on page 5.

The following example will serve as an illustration of how profits might be shifted from one company to another without the knowledge of the Commission.

Mr. Keaney, an accountant working under the auspices of this Commission, and examining into the accounts of the Long Island Lighting Co. and its subsidiary, the Queens Borough Gas & Electric Co., discovered a credit of $227,240.94 passed by the Queens Borough Gas & Electric Co. to the Long Island Lighting Co. No question has been raised as to the propriety or reasonableness of this credit. Inquiry developed, however, that the purpose of this transfer was to reduce the charge for current delivered during the year without a written contract, from the price at which it had been billed during the preceding months of the year. This change was made on the authority of a letter from the head of the company without any explanation of his action in his letter.

Mr. Fitzpatrick, chief accountant for the Commission, stated (3176–3184) that for two years he had been endeavoring to make regular periodic examinations of both operating expense and fixed capital accounts so that each company would be covered every two years; that because of lack of accountants and pressure of other work, he had been unable to make any progress.

Those versed in the subject advise that accounting control will acquire even greater importance in the future than it has in the past. It will prove invaluable, if not essential, in carrying on research in cost accounting, in regulation by contract through stabilization of valuations, in preliminary investigation of the reasonableness of rates by the utilization of annual reports in intervals between valuations and in maintaining effective control of transaction with holding and affiliated service companies. It is clear that such a control cannot be truly effective unless sufficient field examinations are made to enable the Commission to act confidently on its own complete knowledge and not on the evidence of *ex parte* statements and reports.

I bring to the attention of this Commission the recommendation of Mr. Fitzpatrick, accountant for the Public Service Commission. It is his belief that there is needed at once fifteen additional accountants to enable the Commission to conduct more extensive field examinations of accounts (Record, p. 3183).

COST ACCOUNTING

There is great disparity of view with respect to cost accounting in the utility industry. Several witnesses, notably Mr. Cooke (4085–4089), Mr. Evans (4140–4141), and Mr. Dickerman (4928,

4932–4943) urged that the establishment of a more comprehensive and definite method of accounts and reports for determining costs was necessary. They claimed that improved cost accounting would increase the comparability of accounts of different managements and render them susceptible of being judged more intelligently, and further that it would be easier to determine the relative reasonableness of the contributions made by the various classes of consumers to the total revenues required to yield a fair return on the rate base. They also stated that this could be accomplished by classifying fixed capital and operating expense accounts of electric companies in such a manner as to effect a more complete separation of generation, transmission, distribution, street lighting, commercial and general costs.

The testimony of Chairman Prendergast (954) as well as the statement of the Commission filed under "Additional Information Requested by Committee" (5796–5797) indicates as the view of the Commission that the present classification provides adequately for comparison of the efficiency of operation of similarly situated companies. Although it was admitted that the present classification was not satisfactory for cost studies, it was felt that it was not practical at present to require any further separation of accounts by classes of service because of the constant shifting of line from transmission to distribution and vice versa. It was stated also that the New York utility companies had been advised by expert consulting cost accountants that such separation was impossible.

The situation seems to resemble that found by Commissioner Eastman of the Interstate Commerce Commission in his proposed report dated August 15, 1929, entitled *Ex Parte* 91, "General Revision of Accounting Rules for Steam Railroads." In that report he concluded that much had yet to be done in the way of research before final conclusions could be reached. This view is substantially that Chairman Prendergast (958–960) who recommends, with the concurrence of other members of the Commission the establishment of a special research staff to conduct extensive studies on cost of service and rate computation. It would seem, however, that pending the result of that survey the suggestion of Mr. Cooke and Mr. Dickerman relative to the improvement of the method of reporting numbers of consumers, consumption and revenues of various classes of consumers in the annual reports, so as to show separately the statistics of domestic, commercial, industrial, street lighting, municipal and other appropriate classes of service, might well be followed with profit by the Public Service Commission.

APPLIANCE SALES

The accounting classifications of the Commission permit a gas or electric corporation the option, as a matter of policy within the company's discretion, to sell gas or electric appliances at or below cost for the purpose of stimulating the use of gas or electricity, charging the loss to operating expenses as "New Business Expenses"; or to conduct jobbing and merchandising operations primarily for profit in which case they shall be accounted for as a separate department which shall be charged with a proper division of overhead or joint expenses (Prendergast 975–6).

Complaints have recently been made by independent appliance dealers, contending that the sale of appliances at a loss constituted unfair competition, and some of these complaints are still pending (Prendergast, 976).

It has been suggested that the present procedure is undesirable, both from the point of view of trade practice, and of utility regulation. Under the classifications of accounts, as referred to above, if the appliance business is conducted at a loss, a company can decide that it is carried on for the stimulation of sales, and charge the loss, in effect, to the consumers; whereas if it results in a profit, the company can decide that it was operated for this purpose and treat the profit as "Non-operating Income"—from which, in effect, the consumer gets no benefit except as general expense may be relieved by apportionment.

This subject, however, does not appear to call for legislation, but it may be called to the attention of the Public Service Commission so that they may bring their classifications of accounts and the procedure of the companies thereunder into better accord with the requirements of public interest.

DEPRECIATION OR RETIREMENT ACCOUNTING

There exists a long-standing and bitter conflict between these two accounting theories. During the past ten years no subject relating to public utility regulation, excepting perhaps valuation, has aroused more discussion. The record of this hearing is filled with testimony on the subject. Chairman Prendergast at pages 577 and 922-935; Professor Riggs (4013-4064); A. E. Forstall (3897 ff.); Mr. Dickerman (4927 and Exhibit 168); Mr. Olson (4755-4757).

An examination of the record would seem to bring us to these definitions:

Depreciation Accounting

The charging to a Depreciation Expense account and the crediting to a Depreciation Reserve account such an amount in each accounting period as it is estimated will reflect the loss in service value of the entire property, resulting from consumption or from expiration of a portion of its useful life and approach of ultimate retirement. Such a method, it is estimated will accumulate in the Reserve at the time of retirement of each unit or group of units of property an amount equal to its original cost, plus the cost of removal, less the salvage recovered.

Retirement Accounting

The charging to a Retirement Expense Account such an amount as it is estimated will equalize as nearly as possible from year to year the losses on retirement which are, in any one year, the

original cost of the property retired during the year, plus the cost of removal less the salvage recovery.

I am advised by Dr. Mosher, the head of the Research Staff, and also by Mr. Scharff, of Dr. Mosher's staff, that Depreciation Accounting, if logically applied, would reflect the entire depreciation accrued on the property, whether progress toward prospective eventual retirement was due to age and use, change in character of the community, obsolescense of plant and equipment or any other cause. It would burden the cost of service with the same relative proportion of the cost of fixed assets during the early years when a large proportion of the plant was new and actual losses realized on retirements small, as in later years when a large proportion of the plant was old and the losses realized on retirements larger.

Retirement Accounting they say, on the other hand, would entirely disregard depreciation of any kind and would confine itself to equalization of losses realized on retirements over a relatively short term of years before and after the period for which Retirement Expense was being determined.

It is said that both methods of accounting would yield substantially equal charges to operating expenses during any long period of stabilized conditions, without growth or decline and with a stable price level. But Depreciation Accounting would provide a larger reserve throughout the history of a company and would require larger charges to operating expense during a period of development and growth and smaller charges during a period of decline than Retirement Accounting.

Under the provisions of Public Service Commission Act relating to uniform accounts and annual reports, the Commission has authority to require uniform methods of Depreciation or Retirement Accounting, including in Chairman Prendergast's opinion, the authority to specify which of the two conflicting methods that have been referred to shall be adopted (although it may be questioned whether this is included in the authority to prescribe *uniform* methods). It also has the authority to require the companies to state in their annual report the basis used and the amount charged to expense and credited to reserve during the preceding year (Prendergast 918-921, 923). By the decision of the Court of Appeals in *People ex rel. N. Y. Railways Co.* v. *Public Service Commission, 1st District,* 227 N. Y. 373, 193 N. E. 848), the Public Service Commission does not have the authority to prescribe the basis of computation or the amount that may be so charged and credited.

Under its authority, as so limited, the Commission has established uniform classifications of accounts requiring Depreciation Accounting for certain classes of utilities and Retirement Accounting for certain other classes of utilities. Depreciation Accountancy has been required:

1. For steam railroads with respect to equipment and is optional with respect to way and structures and other property. This corresponds exactly with the provisions of the Interstate Commerce Commission classification (Prendergast 923).

3. For telephone companies, with respect to all classes of property. This differs from the Interstate Commerce Commission classification in that the latter prescribes Depreciating Accounting for equipment only, leaving it optional as to way and structures and other property (Prendergast 824).

3. For telephone companies, with respect to all classes of property corresponding with the provisions of the Interstate Commerce Commission classification (Prendergast 924).

Retirement Accounting has been required:

1. For electric and gas companies, corresponding with the provisions of the classifications of the National Association of Railways and Utilities Commissions. This change was made in 1923 from the previous classification which prescribed Depreciation Accounting through the use of accounts designated Amortization of Capital and Reserve for Accrued Amortization of Capital (Prendergast 925-6).

It was stated that the reason for the divergence in use of accounting methods is due to the fact that the Commission changed those classifications that were under its exclusive jurisdiction but did not attempt to change the accounting methods of those utilities over which the Interstate Commerce Commission also has jurisdiction (Prendergast 931-932).

Equally violent is the conflict between the various views as to the relation of depreciation and valuation. These conflicting views are referred to in the testimony of Prof. Riggs (4014 ff.) and in the Proposed Report of the Interstate Commerce Commission in cases No. 14700, Depreciation Charges of Telephone Companies, and in No. 15100, Depreciation Charges of Steam Railroad Companies, prepared by Commissioner Eastman.

The variety of these views may be indicated as follows:

The Interstate Commerce Commission favors Depreciation Accounting on a straight line basis and the deduction of the amount of the Depreciation Reserve computed on the same basis as a measure of depreciation in valuation.

The Telephone Companies favor Depreciation Accounting but deny that the amount of the Depreciation Reserve has anything to do with valuation, contending that observed deterioration is the only measure of depreciation.

Certain of the Railroad, Gas and Electric Companies favor Retirement Accounting, and contend that no depreciation should be deducted from the cost of reproduction of a plant for valuation purposes, if it is giving satisfactory service, or unless there is deferred maintenance affecting the quality of service. Mr. Olson agrees with this position (4756).

Certain Railroad, Gas and Electric Companies favor Retirement Accounting and the deduction from the cost of reproduction of observed depreciation for valuation purposes. Mr. Prendergast, Prof. Riggs and Mr. Forstall all agree with this position; but Prof. Riggs and Mr. Prendergast—and the New York Public Service Commission, as indicated by its decisions in the telephone rate cases, and as recently upheld on this point by the Federal District Court in the *New York Telephone* case—contend in addition that where reserves have been accumulated as a result of applying Depreciation Accounting on a straight line basis, such reserves are a measure of the actual depreciation which should be deducted in valuation. On this point Prof. Riggs is especially emphatic, stating, "I would absolutely prohibit the use of reserves accumulated under the straight line plan, by legislative act, unless that deduction were made" (4030).

A searching analysis of these conflicting views is found in the proposed report of Commissioner Eastman on Depreciation Charges of Steam Railroads and Telephone Companies already referred to.

This situation has also been further complicated by the recent decision of the United States Supreme Court in the *Baltimore Street Railway* case, decided January 6, 1930. In this case the court held that rates fixed by the Public Service Commission of Maryland were confiscatory for the reason, among others, that the Commission included in allowable operating expenses, depreciation based upon actual cost, instead of upon cost of replacement at present day prices.

What has been said regarding depreciation accounting and reserves applies also, to an extent, to other reserves accumulated through charges to operating expense.

In the face of conflicting views, it is perhaps expecting too much to ask that this Commission, the legislature or the Public Service Commission lay down any final, universal rule, particularly until the Interstate Commerce Commission shall have completed its proceedings relative to steam railroad and telephone depreciation.

Nevertheless in order that some advance may be made in effective regulation through Accounting Control two suggestions have been proposed by our Research Staff and I submit them to this Commission for their consideration: They embody amendments to Sections 52, 66 (Subd. 4), 80 (Subd. 3), and 95 (Subd. 2), so as to provide:

1. That the Public Service Commission shall have full authority over all charges to operating expense account of all utilities for the creation of reserves for any purpose whatever, and that no such charge to operating expense and credit to reserve shall be made except in accordance with a rule approved by, and to an amount subject to approval by the Public Service Commission. (Such requirements, of course, should conform to those of the Interstate Commerce Commission, if any, in the case of utilities over which the latter exercises accounting jurisdiction.)

This proposal is quite in line with the provisions of the amendment to Section 20 of the Interstate Commerce Commission Act, added by the Transportation Act of 1920, under which the Interstate Commerce Commission is proceeding in the depreciation cases to which references have been made. This portion of the section reads as follows:

"The Commission shall, as soon as practicable, prescribe for carriers subject to this Act, the classes of property for which depreciation charges may properly be included under operating expenses, and the percentages of depreciation which shall be charged with respect to each of such classes of property, classifying the carriers as it deems necessary, modify the classes and percentages so prescribed. The carriers subject to this chapter shall not charge to operating expenses any depreciation charges on classes of property other than those prescribed by the Commission, or charge with respect to any class of property a percentage other than that prescribed therefor by the Commission. No such carrier shall in any case include in any form under its operating or other expenses any depreciation or other charge or expenditure included elsewhere as a depreciation charge or otherwise under its operating or other expenses."

2. That in determining the reasonableness of rates, the allowable charge to operating expenses for annual depreciation expense, and the deduction of accrued depreciation in valuation shall always be determined on the same basis; and that no plan of providing for depreciation by annual charges on a straight line basis shall be authorized or permitted except upon the express provision that accrued depreciation on the same basis shall be deducted in any valuation proceeding.

It has been urged that modification of the law in these directions is required if progress is to be made toward effective rate regulation or toward the satisfactory performance of other functions of the Commission dependent on supervision of accounts.

SECURITY AUTHORIZATIONS

This Discussion is Extracted From a Memorandum Prepared by Mr. Scharff

The Public Service Commission now has authority to pass upon the issuance of stocks, bonds, notes or other evidence of indebtedness, payable at periods of not more than twelve months after the date thereof. It is provided that such issue shall be made only when an order shall have been secured from the Commission authorizing the same and the proceeds may not be applied, without the consent of the Commission, to any purpose not specified in the order (Sections 55, 69, 82 and 101, P. S. C. L.).

These provisions and the procedure of the Public Service Commission were discussed at the hearings.

It has been suggested that the authority of the Commission over the securities of gas and electrical corporations be completely rescinded (Mr. Cheney, 4451 ff.), for the reasons that the method of financing the requirements of a company do not affect its rates or the interests of the consuming public, that the regulation of securities constitutes an undue burden on the Commission and that such regulation is more misleading than helpful to investors because of the erroneous interpretation placed by the public on the fact that securities are authorized by the Commission.

It has been suggested also that the attempt to prevent capital inflation and speculation by regulation of security issues has been largely defeated through the use of the holding company. This complication has been considered separately. The testimony does not indicate, however, that there should be no control over security issues of operating companies. In the present section some of the weaknesses in the existing control of security issues of operating companies are discussed and suggestions are made for maintaining and strengthening such control.

1. Lack of uniformity in certain respects between the provisions of the various sections relating to security issues was pointed out by the Commission in Exhibit 111 and by Mr. Fitzpatrick in his testimony. In order to correct these inequalities the following amendments should be considered:

A. That the word "ten" in the thirteenth line of Section 69 and in the twelfth line of Section 82 of the Public Service Commission Law be changed to "five" (Exhibit 111, pp. 13-14). This change will not only make these sections uniform with Sections 55 and 101 in this respect, but they will tend to encourage more prompt application for reimbursement, and facilitate accounting control.

B. That Section 101 be amended by eliminating the sentence, "No telegraph corporation or telephone corporation shall be required, however, to apply to the Commission for authority to issue stocks, bonds, notes or other evidence of indebtedness except for the acquisition of property, the construction, completion, extension or improvement of its facilities, or the improvement or maintenance of its service within the state, or the discharge or refunding of obligations or reimbursement of moneys actually expended for such purposes," as recommended by the Commission (Exhibit 101, p. 15) and Mr. Fitzpatrick (3123–4). This change will make this section substantially uniform with Sections 55, 69 and 82.

2. The Commission has taken the position that it has no authority to authorize the issuance of securities in payment of dividends or for any other purpose not enumerated in the statute. The legality of this position has not been judicially determined and it has been

suggested that Sections 55, 69, 82 and 101 of the Public Service Commission Law be amended to so provide.

3. It was recommended by the Public Service Commission (Exhibit 111, p. 17), Mr. Prendergast (448–49), and Mr. Fitzpatrick (3125) that the statute be amended to provide that the securities issued by a motor bus corporation prior to its application for a certificate of convenience and necessity shall be subject to the jurisdiction of the Commission. It would appear that Section 5–6 of the Public Service Commission Law already provides for such jurisdiction over common carriers, and Sections 64, 65, 66 and 67 of the Transportation Corporations Law (Chapter 63, Consolidated Laws) provide that omnibus corporations in cities are, and in villages and towns by action of the town board and village trustees, may be common carriers, so that it may be that this recommendation is sufficiently taken care of already. In order to clarify the situation, however, an appropriate amendment to the Public Service Commission Law should be considered.

4. In *People* v. *Liberty Light & Power Co.* (N. Y. Sup. Ct., Albany County), decided June, 1923, it was held that the Commission has no jurisdiction over exchanges of stock modifying its par value, its status with respect to par value, or its priority or voting rights, where there is no change in the total stated capitalization. It has been suggested that Sections 55, 69, 82 and 101 of the Public Service Commission Law be amended so as to confer such jurisdiction upon the Commission (Fitzpatrick 3125–7).

5. It has been suggested that Sections 55, 69, 82 and 101 of the Public Service Commission Law be amended by adding the words "or receivers certificate" after the words "after the date thereof" in the fourth, fifth or sixth lines of such sections, so as to clarify the situation as to receivers certificates (Fitzpatrick 3123).

6. It has been suggested that Sections 55, 69, 82 and 101 of the Public Service Commission Law be amended by adding an additional provision that the issue of securities as referred to therein, shall include the sale by a corporation of securities previously issued and which were subsequently reacquired (Fitzpatrick, 3123).

7. The Commission now has no jurisdiction over either the amount of or the rate of interest on short term notes (i. e. evidences of indebtedness payable in less than one year). The Commission's view appeared to be that such jurisdiction should not be conferred, for the reason that the capitalization of such indebtedness must eventually come before the Commission in an application for issue of securities at which time all necessary requirements can be enforced; and also because in capitalization cases the Commission controls the rate at which interest may be capitalized during construction periods (Prendergast, 638-42; Fitzpatrick 3127-30). It should be added, also, that the Commission has power "after hearing, to prescribe by order the accounts in which particular outlays and receipts shall be entered, charged or credited" (Sections 52, 66, Subd. 9, 80, Subd. 7, and 96, Subd. 2, P. S. C. L.).

It was brought out that such loans were made by affiliated interests during 1928 to operating companies of the Associated Gas & Electric Co. group to a gross amount of $41,839,335.50 at an interest rate of 8 per cent. (Exhibit 96); during 1926-27-28 to operating companies of the Consolidated Gas Co. group to a gross amount of $110,286,000 at interest rates of 6 per cent. (Exhibit 126); during 1926-27-28 to operating companies of the Long Island Lighting Co. group to a gross amount of $7,750,322.96 at interest rates of 4½ to 6 per cent. or at no interest (Exhibit 127); and during 1926-27-28 to operating companies of the Niagara Hudson Power Corporation Co. group to a gross amount of $62,528,035.12, at interest rates of 4 to 6 per cent., or at no interest (Exhibits 128, 129).

Exhibit 96, referring to loans at 8 per cent., was discussed by Mr. Prendergast (365-8) who stated that it was based upon a report of the Chief Accountant to the Commission; and by Mr. Hopson (5668-5674) who stated that the interest rate was arbitrarily selected by the board of directors, "based on the decisions of the courts as to the fair rate of return." Where interest is charged to an Income Deduction account of a wholly owned subsidiary there is no effect on the net income of the consolidated company. But where such loans are made for construction purposes, the effect of an excessive interest rate, if one is charged, is to inflate both the fixed capital accounts of the operating company and the income account of the loaning company. The Commission now has power to exclude excessive charges to fixed capital, in connection with the authorization of security issues. However, it has been urged that this is not sufficient to accomplish the object of having the accounts correctly reflect the condition of the company at all times, and of enabling them to be used in an investigation as to the reasonableness of rates.

The accumulation of so large a floating debt as to threaten the maintenance of service might also result from unrestricted loan operations without notice to the Commission except as disclosed in annual reports.

The Interstate Commerce Commission Act excludes from the requirement of authorization by the Commission notes maturing in less than two years, with limitations, however, expressed in Section 20 (a), subd. 9 as follows:

> "The foregoing provisions of this section (relative to authorization) shall not apply to notes to be issued by the carrier maturing not more than two years after the date thereof and aggregating (altogether with all other outstanding notes of a maturity of two years or less) not more than 5 per centum of the par value of the securities of the carrier then outstanding. In the case of securities having no par value, the par value for the purposes of this paragraph shall be the fair market value as of the date of issue. Within ten days after the making of such notes the carrier issuing the same shall file with the Commission a certificate of notification, in such form as may from time to time be determined and prescribed by the commission, setting forth as nearly as may be the same matters as those required in respect of applications for authority to issue other securities: Provided that in any subsequent funding of such notes, the provisions of this section respecting other securities shall apply."

It has been suggested that Sections 55, 69, 82 and 101 of the Public Service Commissions Law be amended so as to provide a similar procedure with respect to certificates of notification, and a similar limitation on total floating debt; such 5 per cent. limitation, however, to be based on the stated value of the securities outstanding, as recorded in the accounts of the corporation, instead of the basis applied in the Federal statute.

This amendment, together with more frequent field audits and more active exercise of its powers of accounting control, might help to remedy the present weaknesses of Commission regulation with respect to short term loans.

8. Mr. Fitzpatrick suggested (3173-4) that the statute be amended so as to prohibit any utility corporation from crediting a portion of the proceeds of the sale of non-par stock to capital and a portion to surplus, and also from transferring any portion of its stated capital to surplus. However, both of the transactions mentioned are now prohibited by the classifications of accounts prescribed by the Commission, and it would appear that the present authority of the Commission with respect to accounting control is adequate to cover all such transactions.

9. The method of fixing the price at which securities are authorized to be issued, and the amount of underwriting fees and banker's profits involved were discussed by several witnesses, notably Mr. Fitzaptrick (3132-3152) and (Exhibit 150), and Mr. Manson (4613-4615). Mr. Fitzpatrick stated that issue prices are based upon "Money market conditions, the financial position of the issuing corporation, type and amount of securities to be sold, relation of new securities to those already oustanding and the price at which they were authorized, life of securities and interest rates" (3132). He stated also that "the Commission checks up all the underwriting fees and if the amount is in excess of 3 per cent., it will question the amount" (3134). It is apparent that the underwriting fee and brokerage, plus profit, if any, is substantially represented by the spread between the price received by the company, and the sale price to the public, and not by the stated underwriting fee alone. Nevertheless, Mr. Fitzpatrick stated that the Commission knows nothing about sales by the company under the Commission's order until at least six months after the sale is made, and that it has no information regarding the sale price to the public at any time (3147-3148).

Under this method of supervision there is opportunity for the indebtedness of a utility company to be increased by a profit to an affiliated banking interest, in addition to the underwriting fee.

This, however, is merely one aspect of the general question of controlling transactions with holding and affiliated companies, and is discussed under that heading.

It would appear, however, that the Commission might keep in closer contact with security issues, if instead of the present requirement of reports every six months, as explained by Mr. Fitzpatrick (3149), certificates of notification within ten days of such issues were required, as is provided in Section 20, subd. 5 of the Interstate Commerce Act, which reads as follows:

> "Whenever any securities set forth and described in any application for authority or certificate of notification as pledged or held unencumbered in the treasury of the carrier shall, subsequent to the filing of such application or certificate, be sold, pledged, repledged or otherwise disposed of by the carrier, such carrier shall within ten days after such sale, pledge, repledge or other disposition, file with the Commission a certificate of notification to that effect, setting forth therein all such facts as may be required by the Commission."

It has therefore been suggested that Sections 55, 69, 82 and 101 of the Public Service Commissions Law be amended to make corresponding provision.

REORGANIZATIONS, MERGERS, TRANSFERS OF FRANCHISES OR PROPERTY AND ACQUISITIONS OF STOCK

Mr. Scharff, of Dr. Mosher's Research Staff, has analyzed the testimony on these subjects and furnished data which have been helpful in preparing the following comments.

No suggestion has been made as to the necessity for amendment of those sections of the Public Service Commission Law with respect to actual consolidations and mergers (Section 55, 69, 82 and 101, P. S. C. L.).

The same is true of the provisions relating to reorganizations (Sections 55a, 69a, 82a and 101a), excepting for some minor amendments suggested by the Commission (Exhibit 111, pp. 13, 14 and 16) to correct the error in reference to the Stock Corporations Law.

There is one matter that should be called to the attention of this Commission. The reorganization sections referred to provide that the total capitalization of the reorganized company "shall not exceed the fair value of the property involved plus any amount paid in cash." The Commission bases its valuation, however, for capitalization purposes upon actual or estimated original cost (Fitzpatrick 3166). This policy is recognized as sound since it is not in the public interest to permit companies to capitalize the difference between original cost and fair value by reorganization. In order to give sanction to this policy of the Commission and to avoid any question in the future, it has been suggested as advisable to amend these four sections by eliminating the words "the fair value of the property involved, taking into consideration its original cost of construction, duplication cost, present conditions,

earning power at reasonable rates and all other relevant matters" and substituting therefor the words "the original cost of construction of the property involved, or if complete records are not available the estimated original cost thereof as determined by the Commission."

It should be borne in mind, however, that if a plan is provided for regulation by contract for a term of years on the basis of an agreed valuation, as discussed elsewhere herein, the above proposal should be accompanied by provision for the substitution of such agreed valuation for actual or estimated original cost as a basis of reorganization.

TRANSFERS OF FRANCHISES OR PROPERTY

In order to correct the defect in the law, by reason of which street railways and telephone corporations can sell any part of their property without affecting their franchises, to another utility or a non-utility without action by the Commission (Fitzpatrick 3152-3158), and to bring about uniformity in the law, it has been suggested that it may be advisable to amend Section 54, Subd. 1, Section 99, Subd. 2 of the Public Service Commissions Law by adding after the word "whatsoever" in the fifth and sixth lines of Section 54, Subd. 1, and after the word "whatever" in Section 99, Subd. 2, the words "nor shall the works, system or property or any part of the works, system or property thereof be transferred or leased." And also that the word "or" after the word "franchise" in the first line of Section 99, Subd. 2 be changed to "Nor", and that the word "whatever" in the fifth line of Section 99, Subd. 2 be changed to "whatsoever."

ACQUISITIONS OF STOCK

1. The Commission has stated in its decision in the *Brooklyn Edison* case that it makes the public interest the test in passing on applications for acquisitions of stock, and Mr. Brewster has stated that he believes such acquisitions should be permitted only when it is affirmatively shown to be in the public interest (3966). At the same time, Mr. Brewster pointed out that the Maryland court in passing upon the Maryland statute, similar to the New York statute, ruled that the Commission was required to approve such acquisition unless it were affirmatively shown *to be contrary to the public interest.* He also stated that the decision of the Appellate Division (Third Department) of the New York Supreme Court, in the *New York Electric Company* case had implied that the discretionary power of the Commission in a case of this kind was limited.

Furthermore, it should be pointed out that Sections 54, 70, 83 and 100 of the Public Service Commission Law contain no statement of legislative policy with respect to such approvals. It has been suggested that these four sections be amended by adding a proviso in each case just before the sentence beginning "Nothing

herein contained shall be construed, etc." to the effect that no consent shall be given by the Commission to the acquisition of any stock in accordance with this section *unless it shall have been affirmatively shown that such acquisition is in the public interest.*

2. The Commission has stated in its decision in *Brooklyn Edison* case:

> "The intent of the law, however, is to restrict securities that may be issued by utilities to actual investment in property, and where the capital stock of one utility is purchased by another utility corporation, as in this case, we are of the opinion that any securities issued by the purchasing corporations should be substantially on the same basis that controlled the issue of securities sought to be acquired."

There is no definite statutory authorization for this statement, other than the general authority to pass on security issues and to approve acquisitions of stock subject to conditions. As the Commission has pursued this policy under this general authority without successful attack on its powers, it would appear that such authority is sufficient and that no amendment is required to support it. It should be pointed out, however, that in the *Brooklyn Edison* case the Commission fixed the book value of the Brooklyn Edison stock without deducting the retirement reserve and other reserves built up by charges to operating expense; and that the same procedure was followed in fixing the book value of the stock of the East Hampton Electric Lighting Company upon its acquisition by Long Island Lighting Company in case No. 3296, as shown by the figures on pages 5177-69 and 5177-73 of the record. On the other hand, all reserves, including the contingency reserve, were excluded in determining the book value of the stock of the Queens Borough Gas & Electric Co. and the Kings County Lighting Co. upon their acquisition by Long Island Lighting Co. in cases No. 1098 and 2597 (pages 5177-69 and 5177-73). It would be desirable to call this inconsistency to the attention of the Public Service Commission so that it may be avoided in the future and that its past orders may be amended, where necessary, to bring them in accord with the policy already laid down, which would unquestionably require the deduction of reserves resulting from charges to operating expense in determining book values of purchased common stocks.

3. Mr. Prendergast (438 and Exhibit 111), Mr. Brewster (3970) and Mr. Fitzpatrick (3159) have all recommended that sections 54, 70, 83 and 100 of the Public Service Commissions Law be amended so as to change the reference to "more than ten per centum of the total capital stock" to read "more than ten per centum of the voting capital stock" in each case. This change is proposed to meet the situation created by the decision of the Appellate Division (Third Department) of the New York Supreme Court in the *New York Electric Co.* case, to which reference has already been made. Under this decision, if sustained in the Court

of Appeals, where it is now pending, the Associated Gas & Electric Co. will be able to evade the previous orders of the Commission sustained by the decision of the Appellate Division in the *New York-New Jersey Super-Power Connecting Corporation* case, which have heretofore prevented that company from placing the control of the Staten Island Edison Corporation in a foreign corporation.

In view of the possible complications that may result from changing voting powers of stock and the doubt as to how completely the Public Service Commission can control such changes which do not affect total capitalization, it would seem better that, if the suggested change is to be made, the words "more than ten per centum of the total capital stock" be allowed to remain and that the words "or more than ten per centum of the voting capital stock" be added.

4. It has been proposed by Mr. Fitzpatrick (3159) to place telephone and telegraph companies on the same basis as other utilities with respect to acquisition of stocks of other telephone and telegraph companies. This could be accomplished by adding at the beginning of section 100 the following sentence, "No telegraph corporation or telephone corporation, domestic or foreign, shall hereafter purchase or acquire, take or hold any part of the capital stock of any telegraph corporation or telephone corporation organized or existing under the laws of this state unless authorized so to do by the commission."

CONTROL OF HOLDING COMPANIES AND TRANSACTIONS BETWEEN AFFILIATED CORPORATIONS

The basis of this analysis is a memorandum prepared by Mr. Scharff.

The activities of holding companies have had far-reaching effect upon the operations and financing of public utilities in this State.

Some of the most important recommendations of the Public Service Commission to the legislatures of 1927 and 1929, as contained in the annual reports of the Commission for 1926 and 1928. related to holding companies. These are shown in Exhibits 107 and 109.

The recognition of the important bearing of this problem upon the success of regulation has not been confined to New York State. The Committee on Incorporate Relations of the National Association of Railroad and Utilities Commissioners in its report for 1929, recommended the drafting of uniform legislation to enlarge the powers of commissions over holding companies, where these need broadening. The resolution of the Massachusetts Legislature in 1929 authorizing an investigation of utility regulation made specific mention of holding companies.

About a year prior to the creation of this Commission, the Federal Trade Commission started its investigation of the utility industry under the authority of the Walsh resolution (Senate Resolution 83). The Federal Power Commission has repeatedly

called attention in its annual reports to the impossibility of fulfilling its regulatory duties under the Federal Water Power Act without access to the cost records of the holding companies controlling licensees under the act.

The Senate Committee on Interstate Commerce is also engaged in conducting an investigation of the communications industry under Senate Bill 6, 71st Congress, 2d Session, which includes authority:

> "(2) to investigate the connection, relationship, and ownership and control of corporations and persons engaged in carrying on interstate and foreign communication services and to investigate their trade practices and stock ownership;"

The Interstate Commerce Commission in its annual report, dated November 30, 1929, called attention to the manner in which its regulatory control under the Interstate Commerce Act, including the performance of its duties relative to consolidation of railroad properties, might be partly or wholly defeated through the use of the holding company device. The Commission pointed out that unification of control may be accomplished either directly through ownership by the holding company of the stock of two or more railroads, or indirectly through common control of two or more corporations by the same individuals, and that the process may be facilitated, "by reducing the control of the holding company or of one or all of the carriers involved to a relatively small if not insignificant financial interest through various devices, such as limitation of the voting power of certain classes of stocks, the superimposing or pyramiding of one holding company on top of another, and the like."

Thereafter, the House of Representatives authorized an investigation of the ownership of railways by the Committee on Interstate and Foreign Commerce (House Resolution 134, adopted January 24, 1930).

The Commission on the Banking Laws of New York, in its recent report, concluded that supervision of companies controlling or affiliated with banks and trust companies was essential to the success of the Banking Department. Its recommendations have been helpful in considering this problem.

Considerable testimony was taken before this Commission regarding the desirability and method of control. As a consequence a voluminous record on this subject was built up in the hearings.

EXTENT OF HOLDING COMPANY CONTROL IN NEW YORK STATE

The Public Service Commission Law forbids the acquisition by stock corporations other than utility corporations of the same class of more than ten per cent. of the stock of utility corporations. It is provided, however, that with the consent of the Commission, business corporations may acquire more than ten per cent. of the stock of telephone and telegraph corporations and of gas and electrical corporations outside the former First Commission District.

Moreover, certain classes of utility corporations may with the consent of the Commission acquire more than ten per cent. of the stock of certain other classes of utility corporations. A result has been that holding company control over the electrical industry has become almost universal in New York State. Approximately 98.5 per cent. of all the kilowatt hours sold during 1928 to consumers other than electrical corporations was sold by utilities controlled by holding companies (Exhibits 156 and 206). This 98.5 per cent. of sales for 1928 is concentrated in companies now included in a small number of groups, as follows:

	per cent.
Niagara Hudson group	54.6
Consolidated Gas Co. group	34.8
Associated Gas & Electric Co. group	7.6
Long Island Lighting Co. group	1.2
All other holding company groups	.3
Total	98.5

RELATIONS BETWEEN HOLDING COMPANIES

Intrastate

These few groups of companies are not wholly independent of relations with each other. Two members of the board of directors of the Long Island Lighting Co. are directors of the Associated Gas & Electric Co.; and one trustee of the Consolidated Gas Co., who is a director of its subsidiary electric companies (Mr. N. F. Brady) was a director and stockholder (at Dec. 31, 1928) of Mohawk Hudson Power Corporation, one of the units of Niagara Hudson Power Corporation. In addition, the testimony of Mr. Sloan (5389-5402) indicates that the interconnection of the Niagara Hudson system and the Consolidated Gas System would be economical and may be inevitable.

Interstate Relations

Intercorporate stock holdings which bring about an affiliation between domestic and foreign utilities tend to develop the growth of interstate transactions. Such transactions raise certain Federal questions which are discussed elsewhere. The testimony of Mr. Howard (5231-44) disclosed how far intercorporate stock holdings have already gone toward affiliating the Niagara Hudson Power Corporation with electric companies in other states. The largest and most influential (but not a majority) stock interest in United Corporation is held, according to Mr. Howard, by a group consisting of American Superpower Corporations, Bonbright Electric Co., J. P. Morgan & Co., Drexel & Co., and their clients. The United Corporation with certain of these interests and the United Gas Improvement Co. (in which these same associates with United Corporation have by far the largest, but not a majority, stock interest) own approximately 4,000,000 shares of stock of Niagara Hudson Power Corporation. This is not a majority interest, but is

one of the largest holdings, second only to that of St. Regis Paper Co. It was not made clear as to what, if any, relationship exists between the Paper Co. and these other interests.

The United Gas Improvement Co., together with the associated interests named above, have one of the largest, if not the largest interest in Public Service Corporation of New Jersey and in Commonwealth and Southern Power Co. which controls Southeastern Power & Light Co., supplying through subsidiaries, Georgia, Alabama, and Mississippi. Through United Gas Improvement Co. again the same interests control the principal company supplying Connecticut, the companies supplying Philadelphia and the neighboring sections of Eastern Pennsylvania, as well as the Delaware Electric Power Co. In other words, Niagara Hudson Power Corporation is already related financially with a more or less continuous system stretching along the seaboard from Connecticut in the northeast to Mississippi on the southwest—excepting only Maryland, the Carolinas and Florida. This relation results from intercorporate stockholdings and common ownership by various banking firms of stock in several holding companies, including a New York corporation (Niagara Hudson), a Delaware corporation (United Corporation), a Pennsylvania corporation (United Gas Improvement Co.), etc., etc.

RELATIONS OF HOLDING AND OPERATING COMPANIES

These intrastate and interstate connections between holding company groups are superimposed upon the relation between the several holding companies and certain New York operating companies which they control. Such relationships are as varied as have been the histories of the several companies, their financial polices, and the aims and plans of the individuals or groups that have been responsible for their development.

Types of Control

As a consequence, there are various types of control. In most cases, substantially one hundred per cent of the voting capital stock of the operating companies are owned by the holding companies. A large proportion of interlocking directors and officers are found in these cases. In the more complicated structures, there is wider variation, both in the percentage of stockholding and in the scope of service activities and advisory functions in which the holding companies engage.

Variation is encountered also in the method of organization and relations of affiliated service agencies. Some groups have practically no such agencies, receiving their entire income from interest and dividends on their investments. Others have one or several specially organized service corporations. These may be owned by one of a group of holding companies, or by one or more of the persons or corporations that control these holding companies. Exceptional cases are found where operating companies apparently are controlled by contracts over long periods of time.

Detailed illustrations of these different types of relationship in the New York group have been included in the record, as Exhibit 205.

SIGNIFICANCE OF TRANSACTIONS BETWEEN AFFILIATED INTERESTS

These various types of relationship and transactions illustrate some of the difficulties that have been created for the Public Service Commission by holding company control and transactions between affiliated interests. Opportunities for abuse obviously exist as a result of these transactions between interests which are not in fact independent. Nor can the Public Service Commission even determine whether the interests dealing with each other are or are not independent, unless the identity of all the interests involved is completely disclosed.

Furthermore, no Commission can be in a position to judge as to the existence or non-existence of unwarranted profits without complete information as to every detail of such transactions. Some representatives of utility companies denied the necessity of any extension of the jurisdiction of the Commission, contending that the reasonableness of the payments made by the operating company could be determined by considering what the operating company paid, and what it received in results (Manson 4624 ff., Hopson 5652 ff., Phillips 5177-65,66).

But it appears from the testimony of other utilities representatives and other witnesses that this position is fallacious. Services cannot be specified in sufficiently complete detail to permit an investigator to secure a precise conception of their nature, nor is there any open market by which their value can be judged. Furthermore, where contracts provide for reimbursement of certain salaries and expenses, and these contracts are interpreted by men who are officers of both contracting companies, there exists both the opportunity and temptation for the exaction of excessive profits at the expense of the utility company.

The objection of Mr. Hopson (5652 ff.), that the extension of the jurisdiction of the Commission over transactions between utilities and affiliated service agencies would completely stop the development of the utility industry, particularly in small towns and rural areas, does not appear convincing. The very information disclosed by Mr. Hopson as to the relations and practices of his own companies, and his attitude with respect to the disclosure of more complete information, appears to be strongest possible argument for such extension of jurisdiction.

The fundamental theory of regulation, as has been emphasized by the utilities themselves in public advertising, consists in the payment by the public of rates sufficient to cover cost and to yield a reasonable return upon the fair value of the property employed in the public service. This is wholly inconsistent with the exaction of profits over and above such reasonable return on auxiliary services supplied by the owners or affiliated agencies subject to

their control and recognized by them as essential to the maintenance of good service.

The above illustrations indicate that holding company activities are so interwoven with operating company management and finance that complete information on all of these relationships, services and transactions is essential to effective regulation. This may involve the right of access to affiliated and holding company accounts, the vigorous exercise of power to designate the accounts to which charges shall be made on the books of operating companies, and the placing of the burden of proof in such cases on the operating company. (See section on Accounting Control.)

Where there is actual domination of one corporation by another through stock ownership, contract or otherwise, complete control and regulation is required and is justified in the opinion of many of the witnesses, because in such circumstances the dominating company is actually engaged in public service. In other words, in these cases, the corporate fiction may in effect be disregarded. (See Mr. Howard 5250 ff.; Mr. Sloan 5412.) And certainly no management contracts should be permitted that have not been submitted to and approved by the Commission.

It appears that complete domination may actually have existed in some of the cases that have been considered by this Commission. For example, when a management charge of 5% of gross revenue is imposed upon a group of companies by vote of the Executive Committee of the holding company owning substantially all of their stock, subsequent ratification by the Boards of Directors of the subsidiaries in such circumstances appears merely a gesture. Another situation suggesting such domination exists where the intercompany transactions of 300 to 400 corporations are controlled by two men, holding the voting control of all of these corporations, directly or indirectly. The statement that the various companies are operated by their respective Boards of Directors is not convincing, and the provision in a contract that "Nothing in this contract shall be deemed or construed as a surrender or abandonment by the Board of Directors of the employer of any powers or duties imposed upon them by law" looks much like window dressing.

The fact of effective domination however cannot be completely defined in a statute. If the fact is to be recognized and made the basis of regulation, as has been suggested, the Commission must be given broad powers to establish the fact by a finding made after a hearing, and to regulate the companies so found to be engaged in the public utility business of their controlled subsidiaries.

Another possible means of controlling certain classes of dealings with affiliated interests has been suggested. The suggestion was that such dealings shall only be by contract let to the lowest and best bidder after competitive bids. This has been Mr. Sloan's solution as to the construction work of the New York City electrical companies, and it is the requirement of the Clayton Act relative

to construction and maintenance work of interstate railroads (Section 10 of the Clayton Act).

This suggestion may have value in a limited field, but alone it does not appear to be adequate to deal with the transactions between the local utilities in New York State and affiliated interests.

FOREIGN HOLDING COMPANIES

It is obvious that complications and difficulties are added to the exercise of the supervisory powers of access to accounts of affiliated interests and actual control and regulation of companies dominating New York utilities, as suggested herein, in cases where the affiliated or dominating interest involved is a foreign corporation. It would appear, however, that where such difficulties arise out of the acquisition of ten per cent. or more of the stock of a New York utility corporation, these can be avoided either by refusing approval of applications for the acquisition of such stock by foreign corporations (after appropriate amendment to the Law); or possibly by including in the approval of such applications appropriate conditions requiring such foreign corporations to submit themselves to the jurisdiction of the Public Service Commission to the same extent and in the same manner as domestic corporations occupying similar relationships with utility corporations. With respect to foreign corporations dominating New York utility corporations through contract or other methods than stock ownership, the problem is more difficult, and it appears possible that such relationships cannot be effectively controlled except by procedure for co-operation of the Public Service Commissions in the various states through interstate compact, or by Federal intervention and regulation as discussed elsewhere under interstate transmission of power. Consideration may be given, however, to the possibility of authorizing the Commission to require that no foreign corporation shall operate, manage or control any utility corporation within the jurisdiction of the Commission, by contract or by any other device other than stock ownership, unless such foreign corporation shall agree to submit itself to the jurisdiction of the Commission to the same extent and in the same manner as domestic corporations occupying similar relationships with utility corporations.

SECURITY ISSUES OF HOLDING COMPANIES

Most of the witnesses who favored the control of holding which in fact dominated the operation of utility companies, expressed doubt as to the advisability of regulating their security issues. However it does not appear that there can be effective regulation of the securities of operating companies unless such control is exercised.

One of the most important functions of a regulatory body is to maintain correspondence between capitalization and actual investment. The wisdom of this policy is indicated by the change in the

effectiveness of security regulation by the Public Service Commission before and during the extensive development of holding companies in the last few years. During this time such control has been largely nullified by the ease with which operating company stocks could be placed in the ownership of holding companies and the securities of such holding companies sold to the public on a speculative basis. This reached the peak of its development prior to the stock market break of October, 1929.

For a time the Commission endeavored to extend its control over these transactions by stipulating in its approval of acquisitions of stock that the purchasing company should not capitalize the acquired stocks at an amount in excess of their book value on the books of the operating company. Such provisions were inserted in the order of the Commission in the Buffalo, Niagara and Eastern Power Corporation case (case No. 2621) and the initial order in the Mohawk Hudson case (case No. 2649), but in a subsequent order the Commission rescinded this proviso in the Mohawk Hudson case (case No. 3192), acknowledging that the stipulation had been made without any authority in the existing law.

Many examples could be given of the resultant increase of capitalization over actual investments. Mr. Carlisle, for instance, agreed that the capitalized value of the securities of the three holding companies which were acquired upon the formation of the Niagara Hudson Power Corporation, namely, the Buffalo, Niagara and Eastern Power Corporation, the Mohawk Hudson Power Corporation and the Northeastern Power Corporation, was increased by approximately seventy-seven million dollars over their book value on the books of the issuing companies; and further that the capitalization of each of these subsidiary holding companies in turn was substantially in excess of the book values of the operating companies which they control (3768). It should be added, however, that Mr. Carlisle stated that the fair value of the properties of these companies would still exceed substantially these increased capitalizations.

Another striking example is a case now pending before the Public Service Commission. That is the proposal for the acquisition of the stock of the Long Island Lighting Company by the Long Island Capital Corporation, (Mr. Prendergast 48171 ff., Mr. Phillips 5177-81 ff., and Mr. Langley 5058 ff.). If approved, this plan would permit the acquisition by the Long Island Capital Corporation of three million shares of common stock of Long Island Lighting Company with a book value of $1.70 per share on a basis which would have capitalized it on the books of the purchasing company at an increased value over which the Commission could exercise no control, and which might conceivably have approached its market value, that at the time was in excess of $70 per share. It was believed that the public would have purchased the securities of the Capital Corporation on a basis of this increased capitalization.

Mr. Langley (5058 ff.) and Mr. Phillips claimed that the advantages of this plan for financing the Long Island Company would more than justify this unusual program, while Mr. Carlisle testified that the limitation of the capitalization of operating company securities to a basis of actual investment in the past would have completely prevented the great development of the holding company with its numerous advantages (3766). It is doubtful, however, if these contentions would justify the rejection of this well tried policy of correspondence between capitalization and actual investment.

Nor is evidence lacking that opportunities now exist to utilize the stocks of utility companies in New York State for other undesirable financial operations than overcapitalization, and that if these opportunities are used, the results may react adversely upon the public service. The evidence of Mr. Hopson and the exhibits filed by him, for example, show that the Associated Gas & Electric Company now has outstanding three classes of common stock, five series of preferred stock, eight series of debentures convertible into stock either at the holder's or the company's option, six series of debentures convertible into debentures at the holder's, but not at the company's option, and one series of investment certificates convertible at the option of the holder only for a term of years, and at the option of the holder or the company thereafter. As indicated by foot-notes in the charter as amended to January 2, 1929, the authorized capital stock has been increased, decreased and/or reclassified by amendment of charter sixteen times since 1924, and the preferences of the various classes of stock have been changed ten times since 1924. Inquiry at the office of the Secretary of State at Albany has also developed that further changes in the number of shares, reclassification and/or preference rights of the capital stock have been made by amendment of the charter nine times since January 2, 1929. Only one class of stock, class B, has unrestricted voting rights, and a majority of this class is held by a corporation controlled by two persons. The common stock has voting rights only when conferred upon it by a majority of the class B stock, and the class A stock only when stipulated dividends are in arrears for two years. With such a financial structure at the top of the pyramid built on the securities of the operating companies, opportunity is afforded for financial operations, over which the Public Service Commission has no control and which might well be injurious to the rates and service of the operating companies.

It has therefore been suggested that consideration be given to the amendment of Subdivision 7 of Section 5 of Article I of the Public Service Commission Law so that the provisions now applicable to the issue of securities and acquisitions of stock of operating utility companies shall be equally applicable to the issue of securities and acquisitions of stock of every corporation owning fifty per cent. or more of the voting stock of a utility corporation under the jurisdiction of the Commission, and which may be found by

the Commission, after investigation and hearing, to be actually dominating such utility corporations to such an extent as to be considered by the Commission as engaged in public utility operation. In all other cases it would seem better to leave the security issues of holding companies of other types to be controlled by other agencies than the Public Service Commission, even though it may be true in some cases that undesirable financial practices in these companies may effect adversely the service or rates of operating companies.

As suggested in the section on Reorganization and Acquisitions of Stock interests, any provision authorizing the Commission to control issues of securities and acquisitions of stock interests in such a manner as to maintain correspondence between capitalization and actual investment, should include a proviso that, if a valuation is agreed upon between the Public Service Commission and any company or companies, as a basis for regulation thereafter for a term of years, as suggested elsewhere herein under Valuation and Rates, then such agreed contract valuation shall thereafter be substituted for actual investment for the purpose of regulating security issues and acquisitions of stock interests of such operating companies and of all other companies, under the jurisdiction of the Commission whose securities may be secured by or represent an interest in the securities of such operating companies.

CONCLUSION

Summarizing this analysis of the problems of the holding company and of transactions between affiliated companies, it has been suggested that much more extensive authority and information that the Commission possesses under the present law is necessary. Such information should be adequate to permit the Commission to recognize affiliations and indentities of interest where they exist, and the Commission's authority should include adequate access to records of affiliated agencies for the purpose of disclosing all the facts as to costs and profits and authority to eliminate from the accounts profits created by dealings between substantially identical interests.

It has been proposed that the Commission should also have power to require complete disclosure of the identity, relationships and respective interests of every owner of any substantial interest in the voting stock of utility corporations.

It has also been proposed that the Commission should have access to the accounts and records of every person, firm or corporation dealing with a utility corporation and able to influence its actions through control of any substantial interest therein, or otherwise.

It has also been proposed that the Commission should have complete regulatory control of companies dominating and engaged in operating public utility corporations under its jurisdiction.

INTERSTATE TRANSMISSION

With the expansion of holding companies into larger and larger areas the problem of interstate transmission will increasingly come to the fore. The testimony before the commission bears witness to the fact that state boundaries are no barrier to their activities. A serious situation in the matter of regulation already exists in New York State where a number of operating companies are under the control and actual management of holding companies. With this development it may be predicted that power will be transmitted across state lines in increasing volume. In the space of three years (1926-1928) the amount of electricity exported from and imported in New York has materially increased; in the case of imports, from 17,000,000 kwh to 52,000,000 kwh. This is not any considerable part of the electricity generated in the state but it marks a trend that will undoubtedly hold for the future.

Where interstate transmission occurs, regulation of rates is impossible whenever electrictiy is sold by one distributing company to another for resale to consumers. This question was settled in *Public Utilities Commission* v. *Attleboro Steam and Electric Co.*, 273 U. S. 83.

The interstate holding company creates additional problems because the Commission cannot secure information as to the costs of production and transmission. If the books and contracts are in another state, the fact for determining a rate base and costs of generation are lacking and effective regulation is balked. This lack of information may even extend to the salaries of the officers of the operating company which may be paid by a foreign holding company (4588).

There has been introduced by Senator Couzens of Michigan a bill which has as its aim the regulation of both communications and power by means of a special Federal commission to be known as the Commission on Communications and Power. Among other things, this bill provides for joint boards to settle power issues involving two or more states. These joint boards are to be composed of one representative from each State in which the energy is produced or consumed. State representatives are to be selected in such manner as the State law may provide. Joint boards are to function even if the State fails to provide a representative. If a majority of States fail to do so, the Commission shall take original jurisdiction. (Appeals are to be taken to the Commission on Communication and Power.)

In 1925, representatives of New York, New Jersey and Pennsylvania Public Service Commissions met for the purpose of studying the regulation of interstate electricity for light, heat and power. This group was disrupted because New York disagreed and submitted a memorandum which in my opinion missed entirely the purpose and uses and flexibility of a compact.

It seems to me that a compact is a very desirable method for States having a common problem.

It is suggested that a body designated by the State and independent of the Public Service Commission, be appointed to make a general survey of the needs of the State and of the unification of services with other states. This body should explore this problem and make its recommendations. It would seem desirable, if the State wishes to retain control of regulation within its own lines that it should facilitate that control by working arrangements with other states.

JUDICIAL REVIEW

We have already indicated that the administration of rates under the decisions of the Supreme Court has been so difficult and complex as to create a serious obstacle to effective regulation by state commissions. This has been further complicated by the fact that in these questions of valuation the utilities have been quick to seize upon an adverse order by the Commission to rush at once to the Federal courts, where the entire proceedings are started anew, involving endless delay and expense to consumers. The courts of both the state and the nation are equally available for review of any orders of the Public Service Commission which are alleged to be unlawful. In order to reach a determination of the reasons which prompt the utilities to seek relief in the Federal courts rather than in the State courts, an analysis of the procedure for relief offered by law in both tribunals is essential.

REVIEW BY THE COURTS OF NEW YORK STATE

Prohibition

A writ of prohibition may be issued to restrain an official from performing a judicial act which he has no jurisdiction to perform. The jurisdiction of the Commission to act is rarely an issue in a case. This form of proceeding has been sought to stop action by the Public Service Commission only five times since its creation in 1921, and in only three of these cases was the writ granted.

Action to Enforce Orders

In case a person or corporation should refuse to obey or comply with an order of the Public Service Commission, the New York law makes specific provision for the use of the State Courts in compelling obedience of such an order. Heavy penalties and forfeitures are placed upon failure or neglect to obey or comply with orders of the Commission, and provision is made for actions to collect any such forfeitures. Furthermore the Commission is directed to go before the court on petition for mandamus or injunction to compel the performance which its order prescribed. These actions may be commenced whenever the Commission is of the opinion that an order is being violated or is about to be violated. Since the practice of utilities objecting to a Commission order is to obey the order and then seek their relief, the occasions for resort to this form of action are rare.

Only twice since 1921 has any case arising under these provisions been accorded such prominence as to obtain publication in the court records. In one of these cases the mandamus sought by the Commission was issued. In the other action the Supreme Court, at Albany Special Term, refused to order the forfeiture of penalties for failure of the defendent to obtain from the Public Service Commission an order of approval for the substitution of non par for par value stock. In this case the court did not set aside an order of the Commission, for no order had been made. It refused to order a forfeiture of penalties for the violation of a statute on the ground that the statute had not been violated.

Injunction

A writ of injunction may be obtained in the Supreme Court of the State against the enforcement of an order of the Commission on the ground of confiscation. Upon the granting of such an injunction, a Referee is usually appointed to hear the case *de novo* and the entire matter which has been heard before the Commission is tried over again. Although an application for an injunction in the State Courts is exactly the same as the relief by injunction in the Federal Courts, yet before the complaining party may reach the Supreme Court of the United States, he must first appeal to the Appellate Division and the Court of Appeals. Under Federal practice, however, an appeal lies to the United States Supreme Court directly from the statutory court which originally hears the application. It is not surprising therefore that the utilities have never availed themselves of this remedy in the State Courts. The present Commission has not once since its creation in 1921 been enjoined by a bill in equity in a state tribunal.

Appeal

The New York Railroad Law provides that any order of the Public Service Commission relative to the elimination of grade crossing may be carried on appeal to the Appellate Division. Under this provision the orders of the Commission are subject to review in the same manner as are the decisions of the Supreme Court.

Five "appeals" from grade crossing orders have resulted in reversal of the Commission. In six other "appeals" the Commission's order was affirmed. In each of the five reversals except the 1929 decision related above, the Commission was reversed because of a wrongful interpretation of its statutory authority.

Certiorari

The most common method of judicial review, and the method by which most orders of the New York Public Service Commission reach the State courts, is review by the Appellate Division upon a writ of certiorari. Before a writ of certiorari may be issued, an application must have been made to the Commission by the complaining party for a rehearsing within a certain time. If the re-

hearing is denied or if the time within which such application may be filed has expired, a petition may be made to the Supreme Court that the record of the Commission be certified for review. If the petition is granted, the record of the proceeding by the Commission (including the minutes of hearings, exhibits, opinion of the Commission, and final order) will be laid before the Appellate Division of the Supreme Court. After argument by the complainant, the counsel for the Commission, and any other interested parties who may be permitted to intervene, the court will issue an order affirming, setting aside, or modifying the order of the Commission. While the court must confine its attention to the record before it and to the argument and briefs of counsel, it none the less has extensive powers of review. It may decide that the order of the Commission was not made in a lawful manner, e. g., that notice was not given to proper parties. The court may decide that the Commission wrongly interpreted a statute and consequently issued an order upon a subject entirely outside its jurisdiction. Again, it may be in the opinion of the court that while the Commission possessed authority over the subject matter of the order, it had made a decision which was contrary to the showing of the evidence. If the court finds that the action of the Public Service Commission was arbitrary, capricious, or without reason, it may hold that the Commission exceeded its lawful jurisdiction, or that it deprived the complainant of his property without due process of law. An appeal lies from the Appellate Division to the Court of Appeals and from there to the Supreme Court of the United States.

An analysis of the cases in which the New York Public Service Commission has appeared before the higher courts of the state since 1921 indicates that the validity of the Commission's orders has been tested on forty-three occasions. Twenty-four of these forty-three actions were reviewed by certiorari. One of these actions is now pending in the Appellate Division. Another, decided against the Commission in the Appellate Division is now on appeal before the Court of Appeals. Twenty-two of the twenty-four certiorari cases have reached a final determination. In fourteen of the twenty-two cases, the order of the Commission was affirmed; in eight the order of the Commission was annulled. One of the eight cases in which order of the Commission were annulled on certiorari, was a memorandum decision. Of the other seven, two were clearly questions of interpretation of statute. The other five were rate cases.

Considering the remedies offered to the utilities in state tribunals, the writ of prohibition may be dismissed since occasion for its use is rare. The fact that an application for an injunction in the Supreme Court will result in greater delay in reaching the highest court in the land as compared with a similar application in the Federal Court carries considerable weight. It has been urged, however, that effective relief is provided under the present writ of certiorari from the Appellate Division.

The argument may be advanced that the provision of the law requiring that an application for a rehearing be made before a writ of certiorari is granted is conducive of delay. It is true that the time within which such application may be filed can be extended at the discretion of the Commisison, and that the times for the rehearing itself may be further extended. However, the benefits derived from this procedure outweigh the objections thus raised. The promulgation of rates are susceptible to change under constantly changing economic conditions. Between the time when the facts upon which the Commission order is issued is presented and the time when such order is reviewed in the Appellate Division, conditions may have so altered as to make a substantial modification of the order necessary. These changes can be advanced at the rehearing and the rates affected by the original order brought down to date. Furthermore experience has shown that many matters have been settled at a rehearing which otherwise might have been plunged into extensive litigation in the Courts.

An analysis of the procedure under a writ of certiorari indicates that the Appellate Division makes a full determination of the law and the facts as presented before the Commission. There can be no complaint on the one hand that the Appellate Division is unduly substituting its judgment for that of the Commission, or on the other hand that the rights of the complaining party under the Constitution of the United States do not receive proper judicial review. The state courts in interpreting the valuation methods of the Commission merely interpret the powers of the Commission as set forth by the decisions of the higher courts of the state and the nation including the Supreme Court of the United States to which an appeal may be taken.

The objection to the fact that utilities are seeking relief in the Federal Courts rather than in the State Courts can bear argumentative weight only if the State has provided in its own tribunals an adequate and speedy procedure for the determination of matters where relief is sought. That this procedure has been supplied by the State by means of a writ of certiorari has been constantly emphasized. However the utilities have chosen to seek their relief in the Federal Courts. Throughout the testimony fault has been found with this procedure not only by members of the Commission of this State, but also by members of commissions of other states. In all of the controversy over utility regulation the utilities have been well night unanimous in insisting that effective regulation could be found not under Federal statutes but under State statutes. This principle has often been publicly discussed and great stress has been placed upon the sovereignty of a state in dealing with the utilities within its own borders. It would hardly seem unfair therefore to ask them to exhaust their remedy in the State court. In point of fact, with the congested condition of the lower Federal courts today it would seem that speedier relief could be found in the State courts.

REVIEW BY THE FEDERAL COURTS

Under the present laws of the United States, an injunction may be sought in the Federal Courts against an order of the Public Service Commission on the ground that such an order will result in confiscation. The procedure involved in the determination of whether or not this injunction shall be granted is lengthy and involved.

As has been noted, a review in the state courts by certiorari is based upon the record of the Commission, and the Court will inquire into the action of the Commission only on those matters which are questioned by the complainants. Any finding or decision of the Commission which is tacitly accepted by the complainant will ordinarily be accepted as final by the court. The record of the Commission is before the court as evidence.

Review in the federal courts, however, in quite different. The United States Judicial Code makes no provision for the certification of the record of the state administrative body. Consequently when the utility operator comes before the federal District Court the statutory court of three judges convened to hear the plea has no record upon which to base a decision. If the action complained of is a rate order, the court cannot reach a final disposition of the petition until it has ascertained the value of the property involved and whether the schedule of charges sought to be set aside will yield a fair return on that valuation. In order to ascertain the value of the property used and useful in the public service, the court appoints a master, who, acting as an officer of the court, is instructed to make a valuation. The nature of the investigation which will be made doubtless depends upon the master himself. Whether he will make a thorough and independent valuation or whether he will spot check the valuation by the Commission is apparently a matter for his own discretion. If the litigating parties consent, the master may make use of the record of the proceedings of the Public Service Commission. In the *New York Telephone Company* case, the company consented to the use of the record, but the master of his own accord ruled it out (296).

During the period of the present Public Service Commission of New York, special masters have on nine occasions been appointed by federal statutory courts to determine the valuation of utility property. In each of these investigations the master found the schedule of charges fixed by public authority to be insufficient to yield a fair return upon the fair value of the property. In eight of these cases the court issued a permanent injunction restraining the Public Service Commission from enforcing the rates on the ground that for the Commission so to do would deprive the utility corporation of its property without due process of law. In each of these eight cases the schedule of charges in question was fixed not by the Commission but by a statute. In the ninth case, an action by the New York Telephone Company to enjoin the enforcement of rates fixed by the Commission, the master reported that the rates were confiscatory. The final determination by the court

while not completely endorsing the finding of the master, permanently enjoined the enforcement of the rates fixed by the Commission on the ground that they were confiscatory.

To the valuation of the property of the New York Telephone Company the Public Service Commission devoted more than three years. More than 25,000 pages of testimony was collected in formal hearings. Following petitions in equity seeking to enjoin the enforcement of the rates so fixed, the federal court appointed a master in equity who proceeded to revalue the property. He conducted 710 hearings at which 609 witnesses gave testimony amounting to over 36,000 pages. 3,288 exhibits were presented, several of them consisting of more than one volume and one exhibit filling several volumes. The time necessary for this revaluation exceeded four years (Exhibit 49 and p. 298).

The reason for popular dissatisfaction with this system of revaluation by special masters in chancery is not hard to see. There are two distinct objections to this type of judicial review:

(1) The second valuation of the utility property by the master is not only costly and time consuming but serves no useful purpose.

(2) The second basic objection to federal judicial review in its present form rests on the theory that rate making is not only a problem of the mere interpretation of established law. The law demands that the utility rate or charge be fixed only after a proper weighing of various indices of value. Accountants, economists and engineers dispute over these indices and their application. To resolve these disputes is the task of the judge. Plainly the proper resolution of these disputed theories requires understanding of matters far removed from the construction of statutes and the reconciliation of previous judicial decisions. The judge must himself appreciate the significance of certain economic phenomena. This important social problem should be preserved in the hands of the state judges. The state should not be required to surrender to the judges of the national courts so essential a key to the welfare of its people. We are convinced that some method should be evolved to insure to the courts of this state an opportunity to make a judicial determination of the matters involved in rate cases before any such determination shall be made by the federal courts.

RELIEF FROM FEDERAL REVIEW

Let us consider briefly whether there is at present any state or federal legislation which will furnish us with such a method.

Section 266 of the United States Judicial Code first prescribes the procedure for the entertainment of petitions for interlocutory injunctions in the federal courts, and then closes with the following language:

"It is further provided that if before the final hearing of such application a suit shall have been brought in a court of

the State having jurisdiction thereof under the laws of such State, to enforce such statute or order, accompanied by a stay in such State court of proceedings under such statute or order pending the determination of such suit by such State court, all proceedings in any court of the United States to restrain the execution of such statute or order shall be stayed pending the final determination of such suit in the courts of the State. Such stay may be vacated upon proof made after hearing, and notice of ten days served upon the attorney general of the State, that the suit in the State courts is not being prosecuted with diligence and good faith. The requirement respecting the presence of three judges shall also apply to the final hearing in such suit in the district court; and a direct appeal to the Supreme Court may be taken from a final decree or denying a permanent injunction in such suit."

In order that the provisions of the above section should be taken advantage of by this State, it would be necessary to amend the present law to abide for a mandatory grant of a stay of the Commission order by the State Court. In cases where an existing rate is claimed to be confiscatory and a utility seeks to advance the rate but is ordered to continue it by the Commission, there would be practical difficulties to such a stay of the Commission order. Furthermore, even if these difficulties could be overcome, there are numerous devices by which the utilities could get around the provisions of this section. In a memorandum prepared for William G. Fullen, Chairman of the New York Transit Commission, in response to a question by Mr. George W. Wickersham, Chairman of the National Commission on Law Observance and Enforcement, Mr. George H. Stover, Counsel to the Transit Commission, outlines very clearly the above and other objections to an effort by the state to take advantage of Section 266.

It has been suggested that if the State wishes to take advantage of Section 266, a statute should be passed similar in form to that suggested by Mr. Welch Pogue in "State Determination of State Law and the Judicial Code," 41 *Harvard Law Review* (1928), 623, 637:

"Whenever a suit praying for an interlocutory injunction shall have been begun in a federal district court to restrain any official or officials of this state from enforcing or administering any statute or administrative order of this state, or to set aside or enjoin such statute or administrative order, any defendant in such suit or the attorney general of the state may bring a suit to enforce such statute or order in the district court of the state at any time before the hearing on the application for an interlocutory injunction in the suit in the federal court; and jurisdiction is hereby conferred upon the district courts of the state, and on the supreme court on appeal as hereinafter set out, to entertain such suit with all the powers hereinafter granted. The district court shall, when such suit is brought, grant a stay of proceedings by any state officer or officers under

such statute or order pending the determination of such suit in the courts of the state. The district court shall, upon the bringing of such suit therein, at once cause a notice thereof, together with a copy of the stay order by it granted, to be sent to the federal district court in which the action was originally begun. An appeal may be taken within ten days after the termination of the suit in the state district court, to the supreme court of the state and such appeal shall be in every way expedited and set for an early hearing."

Section 265 of the Judicial Code of the United States, reads as follows:

"The writ of injunction shall not be granted by any court of the United States to stay proceedings in any court of a State, except in cases where such injunction may be authorized by any law relating to proceedings in bankruptcy."

Taking this section literally, it would appear that if the state can carry the administrative order into the state court for review before the utility can begin action in the federal court, injunction proceedings in the federal court will be barred. But, under the present provisions of the law, the Commission may only bring an action in the state court to enforce its orders, and the practice of the utilities has been invariably to obey the orders of the Commission and then bring an injunction in the federal courts. Furthermore the courts have construed this section in a manner that leaves doubt as to its effectiveness in an action by a state officer to enforce an alleged unconstitutional ordinance.

It is apparent therefore that amendment of the present laws of the State to take advantage of existing Federal legislation in rate cases may not solve the problem. It remains to be determined whether under existing principles of law as expressed in the courts, a plan may be evolved to meet our needs. Such a plan has been suggested. It contemplates a provision by statute whereby the Commission in making a determination relative to rates, shall not at once issue an order, enforcible by penalties as provided under present statutes, but shall make certain findings as to rates. These findings shall be presented to the utility concerned and a definite period of time shall be provided within which they may be accepted or rejected by the utility. If accepted, the Commission shall issue an order for the institution of such rates having all the force and effect of an order issued under present statutes. Formal acceptance by the utility might be required in language which would preclude the raising of any later objection. If formally rejected, no penalty shall attach and no binding or enforcible order shall be issued until the Commission shall have brought a petition in the Appellate Division of the Supreme Court of this State for judicial determination of the merits of the claims of the Commission and the utility as to such rates. Upon such judicial determination, the Appellate Division shall either affirm the findings or remand them to the Commission for further consideration. If affirmed, the Commission

thereupon may issue an enforcible order pursuant to these findings. From such determination, an appeal will lie to the Court of Appeals.

Definite assurance that this plan will accomplish its purpose can be finally determined only by the courts. Objections to its effective operation have been advanced and are presented below:

(1) The theory of the plan is based upon the assumption that until there is an enforcible order or a threat of enforcement resulting in alleged confiscation, the utility cannot go to the Federal Courts and ask for an injunction, for there is nothing from which the utility can seek relief.

However, in analyzing the effect of the findings of the Commission, it is entirely possible that the Federal Courts will hold that in spite of the absence of an enforcible order a threat of confiscation does actually exist which would entitle the utility to relief in the Federal Courts. In a recent case in the Federal District Court for the Eastern District of Kentucky (*Central Kentucky Natural Gas Co.* v. *Railroad Commission of Kentucky, et al.*, U. S. Daily, February 14, 15, 1930), an order of the Kentucky Railroad Commission provided that the order should be suspended for thirty days after the entry of the order and if the utility instituted a proceeding in the state courts within that time, the order would be suspended for such additional time as the matter was pending in court. The Court held that the Federal Court could exercise jurisdiction and said:

> "It is argued that as the operation of the order is thus suspended pending a judicial determination of the question of confiscation, there has been and can be no taking without due process. The trouble with this contention is that the defendants entirely ignore the plight the plaintiff found itself in upon entry of the order complained of. Plaintiff was then faced with the necessity of making a decision as to whether it should not resist the order in a judicial proceeding. If it did not resist, then by the terms of the order it became operative at the end of 30 days. So from the very date of its entry the railroad commission was under the duty of enforcing the order at the end of 30 days, if court proceedings had not been instituted; and by the express language of the order itself, the commission was threatening so to do. . . . If, then, its enforcement by the railroad commission would deprive the plaintiff of its property without due process of law, undoubtedly such threatened enforcement justified a resort to a court of equity to prevent such confiscation, provided the other necessary grounds for equitable jurisdiction exist. Such a suit would present solely a controversy arising under the Constitution of the United States, of which district courts are given jurisdiction under section 24 of the judicial code."

The suggested plan may be distinguished from the circumstances in the above case in that the Commission shall issue no order

enforcible within any period of time until after judicial determination of its findings.

(2) Even where there is a natural threat of confiscation, the United State Supreme Court has held that the Federal courts, for reasons of comity, will not take jurisdiction until the State has completed its last legislative act (*Prentis* v. *The Atlantic Coastline Co.*, 211 U. S. 210; 1908). It is the intention of the suggested plan to postpone the last legislative act of the State, namely the issuance of the Commission's order, until the Appellate Division has made a judicial determination of the Commission's findings. However, the Supreme Court has also held that unless, pending the last legislative act of the State, some provision is made to relieve the utility from the alleged confiscatory rate, comity must give way to constitutional right and an injunction in the Federal courts will lie (*Pacific Telephone & Telegraph Co.* v. *Kuykendall*, 265 U. S. 196; 1924). To be effective, therefore, the suggested plan must be accompanied by some mandatory provision as to suspension of alleged confiscatory rates, the practical and other objections to which have already been noted above (See memorandum of Geo. H. Stover referred to above).

(3) The Constitution of the State of New York will not permit legislative functions to be conferred upon the courts of the State (Article 6, §§ 1, 2). Although the suggested plan comprehends that the Appellate Division may only make a judicial determination of the Commission findings, yet since the Commission is not given authority to make an order until the Appellate Division has passed thereon, it may be argued that this in substance, if not in form, is conferring a legislative function upon the court in that the court alone can confer the power to translate the Commission findings into an order.

(4) It has been objected that at the time that the action of the Commission is brought in the Appellate Division, there may be in effect no controversy in existence, and that therefore the Appellate Division is being asked to give an advisory opinion. This it has no jurisdiction to do.

(5) The suggested plan contemplates that the Appellate Division would act judicially in determining the matter under dispute. It would not be possible, therefore, for the utility to reach the Federal courts after the determination of the Appellate Division since the matter would be *res judicata* (*Detroit & Mackinac Railway* v. *Michigan Railway Comm.*, 205 U. S. 402; 1914). However, if in an endeavor to do away with objection (3) above, the New York Constitution were amended to permit legislative functions to be conferred upon the Appellate Division, and if the suggested plan were revised to come more clearly within the principle of the *Prentiss* case by deliberately conferring legislative functions upon the Appellate Division in its review of the Commission findings, it would be possible for the utility to invoke the jurisdiction of the lower Federal courts after the Appellate Division had passed upon the matter, for, since there had been no judicial determination

thereon, the matter would not be *res judicata.* Practical considerations, however, might persuade the utility to seek its remedy by appeal to the Court of Appeals and from there to the Supreme Court of the United States.

(6) Should the suggested plan succeed in freeing itself effectively from the objections above raised, the question arises as to whether it could be attacked on the ground that it cuts off a constitutional right to have questions involving rights under the Constitution determined in the first instance by the Federal courts. But it is submitted that no such constitutional right exists. As was stated above, jurisdiction was destowed upon the Federal courts not by the Constitution but by Congress and Congress may take away the jurisdiction thus granted. A right to such jurisdiction can not be described as a constitutional right (*Turner* v. *Bank of America,* 4 Dallas 8; U. S. 1799; *Kline* v. *Buibe Construction Co.,* 260 U. S. 226; 1922).

Should this Commission determine that it is advisable to separate the functions of the Public Service Commission into two distinct bodies, one administrative and the other judicial, it is submitted that the judicial part of the Commission could be substituted for the Appellate Division in the above suggested plan with direct appeal therefrom to the Court of Appeals.

From the above analysis it can be observed that under existing Federal legislation and judicial interpretation thereof, any plan which attempts to enable the tribunals of the State to exercise exclusive jurisdiction over the issues involved in rate disputes must necessarily meet practical objections. That the best interests of the people of this State will be observed by permitting the courts of the State rather than the Federal courts to pass upon disputes affecting them has been insistently advanced by popular opinion and by the testimony before the Commission. The jurisdiction of the Federal courts is derived from Congress, and Congress can effectively determine under what circumstances that jurisdiction shall be exercised.

It has been suggested that Congressional legislation be enacted to compel the Federal Statutory Court to have the Master review the record before the Commission, rather than try the issues *de novo* (Prendergast, pp. 292, 294–295). Such legislation would only be palliative, and would not strike at the root of the matter. A more drastic remedy has been suggested in the following proposed form for a Congressional legislative enactment by John E. Lockwood, Carlyle E. May, and Samuel L. Rosenberg in an article entitled, "*The Use of the Federal Injunction,*" 43 Harvard Law Review 426 at 456:

> "No injunction suspending or restraining the enforcement, operation, or execution of any statute of a State or ordinance of a municipality by restraining the action of any officer of such State or municipality in the enforcement or execution of such statute, or in the enforcement or execution of an order by an administrative board or commission acting under and pursuant to the statutes of such State or ordinance of such municipality, shall be issued or granted by any Justice of the Supreme Court or by any district court of the United States, or by any judge thereof, upon the ground of the unconstitutionality of such statute or ordinance, where a plain, speedy, and efficient remedy may be had at law or in equity in the courts of the State.
>
> "Provided, that in any case in which it is satisfactorily shown, after ten days' notice to the State Attorney-General, that there is unreasonable and prejudicial delay in the accordance of the aforesaid remedy in the State courts, it shall be competent for the federal court to entertain a suit for injunctive relief in manner and form as if there had been no adequate remedy in the State court."

MUNICIPALITIES AND THEIR RELATION TO THE PUBLIC SERVICE COMMISSION

Section 71 of the Public Service Commission Law provides that the mayor of a city, the trustees of a village or a town board may start a proceeding by filing a complaint in regard to service or rates and the Commission is required to investigate the cause of such complaints. If a group of twenty-five or more consumers have made a formal complaint the municipal authorities occasionally come in and assume the burden of prosecution (122) and in many cases the cities hire experts and make a valuation.

Legal Rights of Cities in a Rate Case

The Supreme Court of the United States has held that a municipality is not a proper party to litigation in a rate case affecting its inhabitants. The New York Court of Appeals has laid down a similar rule as to litigation in the State courts.

In explaining the customary procedure in New York, Chairman Prendergast testified that the utility companies first formally denied the right of the municipality experts to examine the books and then allowed them to secure the necessary material through the Commission. Mr. Prendergast said:

> "Although the Courts have excluded the City of New York from participation as a party, the City's representatives have sometimes come into the case. As a practical matter, there have been no rate proceedings in New York City in either the Federal or State Courts in which the engineers and accountants of the City of New York have not in fact had full access to both the properties and accounts and vouchers of the public utility companies involved" (564).

The evidence shows that while the municipalities have no legal right to demand access to the books of the companies the Commission aims to secure such access through its good offices (504). If the Commission is enabled through the proposed research staff, to furnish required data promptly, municipalities will no longer need access to the books of utilities.

Municipal Ownership

The Investigating Commission made no detailed study of the general problem of municipal ownership. Witnesses from Wisconsin and California were heard by the Commission. A letter from R. Husselman of Cleveland, Ohio, describing the situation in Ohio, was introduced as an exhibit.

The Public Service Commission Law, Article 4, Section 68, paragraph 2, reads as follows:

> "No municipality shall build, maintain and operate for other than municipal purposes any work or system for the manufacture and supplying of gas or electricity for lighting purposes without a certificate of authority granted by the Commission."

If the Commission accepts the monopolistic principle, its policy is to deny the request of the city. An illustration of this practice is found in the case of Watertown where the city wished to sell electricity to consumers in the city but could not secure a certificate from the Public Service Commission.

The suggestion was made that some cities may prefer to open plants in competition with the utilities. In that case it is argued there is no sound reason why they should not be granted the right to do so except where perpetual franchises have been given. Inspection has revealed that most franchises are not perpetual, and that the municipalities may recall their vested rights. Under some circumstances even where companies have a perpetual franchise, it would be within the authority of the Legislature to permit public competition.

Therefore if regulation does not result satisfactorily, it has been suggested that it should be possible for public competition to enter the field. Perhaps the cities will not avail themselves of this opportunity, but the possibility of such action, it is claimed, would go far toward bringing about certain adjustments. Evidence was presented in the hearings in different cases, that potential competition was the cause of lower rates (5720-21). Figures were also presented to show that the rates in municipal plants in cities of 1,000 to 25,000 in New York were lower than in private plants (5722).

Statistics regarding the California municipalities were cited by a witness to demonstrate the feasibility of public ownership and operation. One important advantage claimed by advocates of public ownership is that the investments may be amortized over a period of years, so that ultimately the heavy interest charges on original investment will be wiped off the books. This is contrary to the policy which has generally been adopted by the utility companies.

Interconnected Municipal System

It has been suggested that the creation of utility districts together with interconnection of isolated municipal systems will afford more effective competition with the private systems. If the municipal plants are to be successful, they must have the opportunity to secure the financing, managerial and engineering advantages of the holding company and secure the advantages which come from interconnection. This system would reduce the number of standing plants and utilize off-peak power by interchange. If the State develops its water resources these interconnected municipalities would provide a considerable market for that power.

In the absence of a complete inquiry into this subject doubt has been expressed whether any extension of municipal operation in competition with private plants should be encouraged or permitted, until further attempt has been made to secure effective regulation.

GRADE CROSSING ELIMINATION

The work of the Public Service Commission in connection with grade crossing elimination is described by Mr. Prendergast (193-212, and Exhibits 25, 26, 27) and Mr. Vanneman (2948 ff.). Criticisms of the present procedure are found in the testimony of the late Major W. M. Acheson (1863 ff.). A memorandum prepared by Maurice R. Scharff of the Research Staff of the Commission, based upon the review of the testimony as well as letters from Gov. Roosevelt and Col. Frederick Stuart Greene and of data obtained from the Public Works Department and Public Service Commission, are filed as Exhibit 204.

Certain recommendations were made by Mr. Knox, Corporation Counsel of Niagara Falls (3453 ff.) Also by Commissioner Godley of the Transit Commission relative to the amendment of the New York City Grade Crossing Elimination Act (1391 ff. and Exhibit 135). The Public Works Department, in Exhibit 204, recommended that Sections 89 to 94 of the Railroad Law be amended so as to make the procedure correspond to that of the Grade Crossing Elimination Act. The Public Service Commission, in Exhibits 102, 104, 105, 108, submitted a number of detailed suggestions regarding the amendment of the Grade Crossing Laws.

The evident purpose of the proposal to transfer the present function of the Public Service Commission in regard to grade crossing elimination to the Public Works Department, is that there now exists duplication of engineering work in the present procedure and that a transfer would result in considerable saving in money and in time. An examination of the data, however, indicates that the real difficulty is rather in lack of complete cooperation between the Department of Public Works and the Public Service Commission. The only solution of that problem is to obtain better cooperation.

Mr. Scharff from his study of the data could not find that there has been any substantial duplication of engineering work. The functions of the two groups of engineers are entirely different, those of the Public Service Department relating to the annual pro-

gram, priorities and the settlement of controversies between the railroads and the Public Utility Department; and those of the Public Works Department relating to design and supervision of construction. What is involved is a question of legislative policy. Of course the entire control could be placed in the Department of Public Works. A study of the record indicates, however, that this would result in a greater number of grade crossing controversies being thrown into the courts, and in the end there would be a saving of neither time nor money.

Based upon an examination of all the testimony, the following amendments have been suggested for consideration:

1. In any proceeding before the Public Service Commission, the people's counsel shall act for the Department of Public Works and if the Department of Public Works appeals to the courts from the order or decisions of the Public Service Commission in any proceedings to which it is a party and when such an appeal is filed, the people's counsel shall act for the department.

2. That Section 2 (Subd. 7) of the Grade Crossing Elimination Act (Ch. 678), Section 2 (Subd. 7) of the New York City Grade Crossing Elimination Act (Ch. 677, Laws of 1928), Section 2 (Subd. 7) of the Buffalo Grade Crossing Elimination Act (Ch. 679, Laws of 1928), and Section 5 of the Syracuse Grade Crossing Elimination Act (Ch. 825, Laws of 1928), be amended so as to provide that the hearing prescribed prior to approval of changes or additions which are not necessary to a grade crossing elimination, may be omitted, provided all parties to the proceeding file with the Commission a stipulation setting forth their agreement with and acceptance of the plans for such additional work.

3. That the Buffalo, Syracuse and New York City Grade Crossing Elimination Acts (Chs. 677, 679 and 825 of the Laws of 1928) be amended so as to provide that each shall apply to grade crossing elimination projections located partly within and partly without their respective cities. (Recommendations of P. S. C. to Legislature.)

4. That paragraph 5 of section 2 of the New York City Grade Crossing Elimination Act (Ch. 677 of the Laws of 1928) be amended by adding a sentence at the end providing that any public utility corporations whose structure or factilities are affected by any grade crossing elimination project shall, on written notice from the Commission, proceed at its own expense to relocate or reconstruct the same to such an extent as may be necessary for the elimination (Exhibit 137).

5. That paragraph 6 of section 2 of the New York City Grade Crossing Elimination Act be amended so as to set forth in greater detail the procedure to be followed in preparing plans and specifications and letting contracts for elimination projects as suggested by the Transit Commission (Exhibit 137).

6. That subdivisions 6 and 7 of section 2 of the Grade Crossing Elimination Act (Ch. 678, Laws of 1928), the New York City Grade Crossing Elimination Act (Ch. 677, Laws of 1928), and the Buffalo Grade Crossing Elimination Act (Ch. 679, Laws of 1928) be amended to provide that the cost of the elimination (subd. 6) and the cost of other work included in the order, not necessary to the elimination (subd. 7) shall include all such expense incurred by the Public Works Department, the Transit Commission or the Buffalo Grade Crossing Commission (as the case may be) as may be determined by the Public Service Commission or the Transit Commission (as the case may be) to be properly applicable thereto.

7. For the same purpose and in order to clear up any doubt as to the inclusion of the expenses of these bodies in connection with the acquisition of lands required for eliminations, section 5 (subd. 9) of the Grade Crossing Elimination Act (Ch. 678, Laws of 1928), section 6 (subd. 9) of the New York City Grade Crossing Elimination Act (Ch. 677, Laws of 1928), section 5 (subd. 9) of the Buffalo Grade Crossing Elimination Act (Ch. 679, Laws of 1928) and section 8 (subd. 1) of the Syracuse Grade Crossing Elimination Act (Ch. 825, Laws of 1928) should be amended so as to provide that expense of acquisitions shall include all such expenses incurred by the Department of Public Works, the Transit Commission, the Buffalo Commission or the Syracuse Commission (as the case may be) as may be determined by the Public Service Commission or the Transit Commission (as the case may be) to be properly applicable thereto.

8. That paragraph 4 of section 6 of the New York City Grade Crossing Elimination Act (Chapter 677, Laws of 1928) be amended so as to provide that the Transit Commission (instead of the Attorney General shall secure from a title insurance company abstracts of property titles and deliver them to the Attorney General for examination and certification, as recommended by the Transit Commission (Exhibit 137).

9. That section 89 of the Railroad Law (Ch. 49, Consolidated Laws) be amended by eliminating the words "excepting additional switches and sidings" in the third line, and the words "within twenty days" in the second line of the last paragraph as recommended by the Public Service Commission (Recommendation of Public Service Commission to Legislature, p. 22).

10. That section 90 of the Railroad Law (Ch. 49, Consolidated Laws) be amended by eliminating the words "within twenty days" in the eighth and ninth lines from the end of the section (Recommendations of Public Service Commission to Legislature, p. 22).

11. That section 94, subd. 3, of the Railroad Law (Ch. 49,

Consolidated Laws) be amended by eliminating the words "or the state, county and town", in the eighth and ninth lines (Recommendations of Public Service Commission to Legislature, p. 23).

12. That section 94, subd. 4, of the Railroad Law (Ch. 49, Consolidated Laws) be amended by adding the words "or the approaches thereto" after "structure" in the second line, and by eliminating the words "or the state, county, and town" in the sixteenth line (Recommendations of Public Service Commission to Legislature, p. 23).

13. The Public Service Commission has suggested that subdivisions 6, 7 and 8 of section 94 of the Railroad Law (Ch. 49, Consolidated Laws), be amended so as to provide that the completed work shall be given final approval of the Public Service Commission prior to final accounting as is provided in the Grade Crossing Elimination Act. It appears that this can be accomplished by amending subdivision 8 alone, and it is suggested that this be done, providing also for due notice of completion by the Department of Public Works to the Public Service Commission prior to final accounting (Recommendations of Public Service Commission to Legislature, p. 23–24).

14. That subdivision 6 of section 94 of the Railroad Law (Ch. 49, Consolidated Laws) be amended by adding the words "except that work done pursuant to orders of the Transit Commission shall be subject only to the supervision and approval of the Transit Commission" after "works" in the sixth line, as recommended by the Transit Commission (Exhibit 137).

15. That paragraph 2, section 19, of the Public Buildings Law (Ch. 44, Consolidated Laws) be amended by adding a paragraph providing that bridges, structures and approaches pursuant to orders of the Transit Commission shall be subject solely to approval by that Commission, as recommended by the Transit Commission (Exhibit 137).

REGULATION OF MOTOR CARRIERS

STATUTORY BASIS OF REGULATION IN NEW YORK

The Public Service Commission has not been given general supervision over motor carriers. Such regulation as exists is based upon various provisions in the Public Service Commissions Law and the Transportation Corporations Law providing for the regulation of common carriers. Although Section 65 of the Transportation Corporations Law provides in effect that motor carriers shall be deemed to be common carriers as that term is used in the Public Service Commission Law, Section 2, Subdivision 7 of that law defines the term "common carrier" but fails specifically to include motor carriers within that definition. There are a number of sections (47, 41, 59 and Subdivision 1 of Section 54) which provide expressly for important regulatory powers or authority over steam and electric railroads. These provisions are not made specifically to apply to "common carriers" and might be construed to mean that those grants of power do not extend to motor carriers. It seems desirable that there should be some clarification of existing law and that additional grants of authority should be conferred upon the Commission.

A State may lawfully subject to regulation motor carriers which operate over a regular route, adhere to an announced schedule and give service to all who apply. From many quarters has come a demand for new legislation in respect to such regulation. Representatives of cities and villages have expressed a need of immediate action by the legislature. The Public Service Commission has repeatedly urged upon the legislature the necessity of a restatement of the present law and of conferring additional authority on the Commission. Representatives of the motor bus industry who appeared before the Commission, while not in complete agreement as to details, were unanimous in asserting the need of more comprehensive legislation.

The Public Service Commission has sponsored a bill in the legislature to clarify and increase its powers over motor carriers (No. 508 Int., Senate Bill 484, called the "Thayer Bill"). This bill received the approval of both Houses but was vetoed by the Governor on the ground that any legislation on the subject should be deferred pending the report of this Commission. The provisions of this bill have received the endorsement of the Public Service Commission, the legislature and many representatives of the motor bus industry. It has been utilized as a basis for discussion at the hearings.

NEED FOR A SEPARATE SECTION IN THE PUBLIC SERVICE LAW

Although some basis for regulation over motor carriers may be found in Article III of the Public Service Commission Law, it seems desirable to enact a separate article to deal with this problem. Transportation by motor vehicle while now a relatively small scale enterprise is rapidly developing. The average length of motor bus lines now in existence in this state other than those engaged exclusively within one local government unit, is less than thirty-five miles. Over 50% of the carriers now subject to regulation are unincorporated. To lessen the number of problems which must be solved by the Public Service Commission it is necessary to clarify and to bring within the provisions of one article all of the laws relating to regulation of motor carriers. The very nature of the motor transportation industry with its different problems and changing needs calls for separate treatment by the legislature.

NOTE.—The preparation of this subject has been based largely upon a memorandum prepared by Dr. Charles S. Hyneman of the Research Staff.

GENERAL POWERS OF THE COMMISSION

It has been constantly urged that there should be explicit statutory authority for general regulatory powers of the Public Service Commission in respect to motor carriers, and that legislation upon this point should confer upon the Commission essentially those powers which were provided for in Section 61 of the Thayer Bill.

MOTOR BUSES OPERATING IN LOCAL STREET TRANSPORTATION

The following suggestions represent the views of various witnesses:

Motor buses operating in street transportation which is confined to a single city or village should be subject to somewhat different regulation than is imposed upon buses operating from city to city. Regulation of operations confined to one locality is less likely to be embarrassing to the operator than is the case where conflicting local requirements are placed on the operator who traverses many localities. Moreover, where the bus is engaged in local service the interest in the adequacy and convenience of the services is confined almost solely to the people of that locality, but in the case of cross-country operations the people of many localities are interested in the service. Only a state can speak for all groups. Such buses must be regarded as links in a state-wide chain of communication and should be freed from such local action as would unreasonably hamper the effective integration of the State's motor facilities. There is another difference in the practical effect of these two types of motor bus operation. Buses which stop at street intersections to take on and discharge passengers contribute in a large part to the congestion of traffic in city streets. Buses which use a fixed terminal and merely take on or discharge passengers bound to or from points outside the city are not likely seriously to affect local traffic problems.

Under the present procedure the operator who wishes to engage in purely local service is required to obtain a consent or franchise from the local authorities. He must then, before commencing operations, obtain a certificate of convenience and necessity from the Public Service Commission. It has been suggested that it is desirable for the Public Service Commission to retain this power to reject certain transportation proposals by refusing to grant a certificate of convenience and necessity.

A city should have the power to stipulate the reasonable conditions under which it will permit a company to use its streets, such as the number of buses, the routes to be followed, the location of terminals, etc. If any such stipulations should appear ill-advised to the Public Service Commission it could then withhold the certificate of convenience and necessity until a satisfactory adjustment had been reached.

The city and the bus operator should be free to negotiate any changes in franchise provisions of this sort, but such new provisions should become effective only upon their being filed with the

Public Service Commission. In case of disagreement between the parties as to the terms of the franchise or as to compliance with the franchise, the Public Service Commission should have power to hear such controversy and recommend a settlement. In case the negotiations of the Commission are ineffective, it should have power to issue orders requiring compliance on the part of either or both parties.

The present authority of the city under its police power, to subject the motor operator to such reasonable regulations as are designed to protect the comfort, safety and convenience of its inhabitants, should be preserved.

CERTIFICATE OF CONVENIENCE AND NECESSITY

The certificate of convenience and necessity is the permit by which the Public Service Commission authorizes an individual or a corporation to institute a motor bus service. The Commission in granting certificates for cross-country buses should be empowered to write into the certificate such conditions of a proper regulatory character as it sees fit. Any conditions of operation which are inserted into the certificate are presumably acceptable to the operator. It has been suggested that the Commission should therefore be given specific authorization to make the certificate a vehicle for the exercise of its proper regulatory powers. In order to make effective the regulatory conditions which it inserts in the certificate, the Commission should have authority to revoke the certificate in case of non-compliance with its provisions. The Thayer Bill provided, in Section 63-h, that the certificate should be forfeited in case the operator should violate any provision of the law or should fail to comply with any regulatory order of the Commission, even though made subsequent to the granting of the certificate. It is suggested that this provision be retained. Revocation of the certificate presumably would entail the discontinuance of operations and it therefore may be looked upon as a very drastic device for enforcing the regulatory powers of the Commission. It is true that no other utility is subject to the enforced discontinuance of its service as a penalty for non-compliance with an order of the Commission. It should however be borne in mind that the motor transportation industry possesses certain peculiarities. The nature of the capital equipment of the motor carrier operator is such that the revocation of the certificate and the consequent discontinuance of the service neither destroys the value of the equipment nor does it indefinitely deprive the public of motor service. Enforced discontinuance of a motor route involves no such financial loss as would follow from the enforced abandonment of a street railway system. Nor would the public be so long deprived of the service of a successor. A survey of the statutes of twenty-five other states reveals that it is a common practice to vest in the Public Service Commission power to revoke the certificate of convenience and necessity.

It has been suggested that any provision for the revocation of certificates of convenience and necessity should be made retroactive as to such certificates as are now actually in use. There are still outstanding a number of certificates which were issued as long as fifteen years ago and which have been abandoned or were never used. From time to time these certificates are purchased and motor bus operations are instituted. The Public Service Commission has acted on the assumption that it must recognize the legality of an operation which follows the route designated by the certificate held by the operator regardless of when and to whom the certificate was originally issued. It has been urged that there be included in any legislation which may be enacted a provision that the Commission may revoke such outstanding certificates as have not been in actual and continued use for a specified period next preceding the date of such revocation.

It has been suggested that any new legislation should contain a provision such as that in Section 63-g of the Thayer Bill to the effect that no certificate of convenience and necessity may be transferred or assigned without an order of the Commission signifying its approval of the transaction. It will be shown in the report of the Public Service Commission for 1929 that over one-half of the motor bus operators engaged in city to city service in New York State are unincorporated. The average mileage of route per operator is less than 35 miles. The average amount of total operating revenue per operator is less than $35,000 per year. The average annual total operating revenue for unincorporated carriers is about $15,000. So long as motor transportation is in the hands of small operators possessing no considerable financial reserves, personal considerations must enter into the granting of the certificate. It is therefore important that the Public Service Commission be given authority to prevent the passage of these motor routes into irresponsible hands. This can be accomplished by giving the Commission power to approve and disapprove the tranfer of the certificate. Such power should be made retroactive as to certificates now in existence. In 15 of the 25 states which were made the subject of inquiry there is a statutory requirement that the approval of the Public Service Commission be obtained prior to any transfers of certificates.

Cities, towns and villages lying along a bus route or a proposed bus route should be proper parties to any proceeding considering the grant, amendment, transfer or revocation of the certificate of convenience and necessity, for such route, as was provided in Section 63-b of the Thayer Bill.

RATES, SERVICE AND CAPITALIZATION

It has been suggested that the Public Service Commission should have substantially the same authority in respect to rates and service of motor buses as it now possesses in respect to other utilities. The provisions of the Thayer Bill on these points could be generally followed.

However, under Section 55 of the Public Service Commission Law, the Public Service Commission now requires all motor bus corporations to obtain approval of their security issues. In some instances corporations have issued securities before receiving from local or state authorities any permit or certificate for operation as a motor carrier. The Public Service Commission has doubted its power to compel the submission of such issues to approval. The Thayer Bill made no provision for the correction of this shortcoming. The suggestion has been made that any new legislation should provide that before any motor carrier corporation may obtain the Public Service Commission's approval of any securities or evidences of indebtedness it must submit all its outstanding securities and indebtedness for approval *nunc pro tunc.*

It is not clear from the provisions of Section 55 of the Public Service Commission Law (and Section 62-e of the Thayer Bill) whether or not there must be approval of long term debts which are incurred by unincorporated motor bus operators. Indebtedness incurred on account of the motor bus operations of an individual should be subject to the same supervision by the Public Service Commission as is applied to corporations. It was urged by one witness that conditional sales agreements entered into for the purchase of motor buses should not be required to be submitted to the Commission for approval (2363-64). There seems to be no reason why the bus operator should object to submission of such agreements. They are usually approved *nunc pro tunc* and therefore occasion no hindrance to the completion of the sales transaction. The requirement that these agreements be submitted to the Public Service Commission may afford the Commission opportunity to enhance the financial stability of the less experienced operators.

LIMITATION OF LOCAL CONTROL OVER MOTOR ROUTES

Section 66 of the Transportation Corporations Law provides that no motor carrier operating over a regular route for the carriage of persons shall begin operation over the streets of any city until the consent of the local municipal authorities has been obtained; and section 67 of the same law provides that any village or town may by resolution come under the provisions of Section 66.

Under the statute, the Public Service Commission may not consider a petition for a certificate of convenience and necessity until the required consents have been secured (Commissioner Prendergast, 254-55). Witnesses have testified that the development of through motor transportation between different parts of the state has been materially hampered by the requirement that the operator obtain consent for passage from every city and most of the villages and towns which he traverses.

The representatives of the motor bus industry agree that the

power of local governments to prevent and to interrupt through motor service should be in some way limited.

1. Cases have been cited where a motor carrier seeking to serve many cities and villages has been unable to begin operations because one or more local government units have refused to grant the necessary consent. In some cases the refusal could perhaps be explained on the ground that the local officials were insistent that the bus operator make satisfactory arrangements for the carriage of local people. In other cases the withholding of consent did not appear to be justified on any ground of local convenience or protection.

Many of the consents which are granted to motor operators are limited to too short a length of time and, it is not unusual to insert in the local consent provision for revocation by the local authorities. In addition, perhaps one-half of the local consents outstanding specify that the consent shall not be transferred without the permission of the authorities which granted it. Consequently no approach to a consolidation of routes can be effected without an appeal to each of a large number of local government units.

The members of the Public Service Commission do not urge the repeal of the statutory requirement that the consent of local authorities be obtained. The Thayer Bill makes no provision for the limitation of local control. Commissioner Prendergast testified at the hearings that he "would not approve" any statute which would take away from the local communities their power to determine whether or not a bus should cross their boundaries. Other witnesses testified that they did not think that such a deprivation of local control would be desirable.

However, Mr. Cornwall cited specific instances where by refusing to grant consents many towns and villages have prevented the establishment of bus service desired by their communities along the proposed route (p. 4214).

2. Duration of local consents. It was urged that stable motor transportation cannot be developed unless the individual operators can be sure that the routes which they have developed can be continued beyond the experimental stage.

According to the opinion of Mr. Cornwall, the motor operator cannot hope to finance his route by sale of securities to the public unless he has a franchise for operation which will not expire for at least 25 years. At the present time the motor bus operator enjoys no such security in his route due to the expiration of local consents. Members of the Research Staff made an analysis of practically all the local consents which were issued during the year 1927-28. This analysis showed that more than 40 per cent. of the motor routes were subject to interruption by expiration of one or more consents within a period of 10 years or less. This would indicate that the continued operation of the motor transportation industry in the state of New York is dependent upon the will of the local communities.

It appears also that many of these consents are subject to revocation by the local authorities. Of the 193 consents examined, 78 contained provisions reserving to the localities the right to revoke.

The provisions for revocation of the consents issued for routes operating through two or more localities may be grouped under four heads. (1) The consent is declared revocable by the local government after notice and hearing, for "cause", "sufficient cause", or for "reasons which shall be assigned". (2) The consent is declared subject to revocation by the local government whenever the company shall fail to meet the requirements laid down or imposed in the consent. (3) The consent is declared revocable upon notice but there is no provision for hearing or for the assignment of cause. (4) The consent is declared to be subject to summary revocation.

That motor bus operators have in the past been harassed to at least a small extent by threat to revoke consents appears from the testimony of Mr. Cornwall (p. 4227-8).

3. Insertion of conditions in local consents. In more than 50 of the consents which were examined by the Research Staff there were provisions intended to fix or limit the fare. In some instances the consent specifies only the fare which shall be charged between given points within the boundaries of the particular government granting the consent. However, there are cases where the consent sets a rate between points within the municipality and points outside its jurisdiction. In other cases the consents specify a maximum rate. Still another group stipulates that the local board shall retain the right to fix the rate at any future time. It should be noted that conditions as to fare were inserted in some consents which specifically recited that there should be no carriage of passengers from point to point within the local jurisdiction. In one consent of this type the city reserved to itself the privilege of fixing the fare at any time it so desired.

Moreover, a great number of localities include in their consents certain specifications concerning the operating schedule of the carrier. In many cases this requirement is to the effect that there shall be a certain number of trips a day, or that there shall be hourly, or half hourly service. Even where these provisions concerning schedule of operation are confined only to that part of the operations which are boundaries of the given municipality, the operating schedule for the whole route is of course almost certain to be affected.

However, provisions concerning the equipment which shall be used by the motor carrier are often reasonable, and may be desirable for the protection of the local community.

4. Local consents are a hindrance to consolidations of routes. Some 300 different operators of motor buses are engaged in cross-country or intercity transportation. As pointed out above, their operations average less than 35 miles. Although it appears evident that the best interests of the state of New York will be served by the consolidation of existing routes, the outstanding local consents are a bar to any program of consolidations. Of 193 consents

examined by the Research Staff, 65 contained provisions stating that they could be assigned or transferred only with the permission of the local authorities. These 65 consents involved 44 different routes. In other words, a project to purchase any of these 44 routes in order to consolidate them with an existing route can be carried out only by obtaining the approval of at least one local government. It appears from the testimony that the consolidation of existing routes has not been seriously held back by local authorities (Van Namee 1154). Mr. Cornwall stated that he could not mention a case where a consolidation of routes had been entirely defeated by local authorities (4225-26). (But see Mr. Schultz 3851.)

SUGGESTIONS CONCERNING LOCAL CONTROL OF MOTOR TRANSPORTATION

Suggestions have already been made concerning the amount of authority which the city should be allowed to exercise over the motor bus engaged in local street transportation. The present paragraph deals with the relation of the local authorities to buses traversing two or more local government units.

Although it is difficult to ascertain from statutes alone the amount of control which is enjoyed by the local authorities, it appears that only a few states require any form of local consent to be obtained before a certificate of convenience and necessity will be granted.

Several reasons are urged in favor or retention of the requirement of local consent. It is contended that the provision of Article XII of the New York Constitution, commonly called the home rule provision, requires that the city cannot be deprived of the power to determine what motor carriers shall enter its limits. No authority has been cited in support of this contention, and a mere perusal of Article XII seems sufficient to dismiss the argument as specious. Moreover, it may be pointed out that steam railroads are not required to obtain local consent before entering the precincts of the city. The same is true of motor trucks engaged in common carriage and operating over a regular route.

It has been urged that it would be contrary to the general principle of local autonomy (254-57). However, the evidence reviewed in the foregoing pages indicates that the problem of intercity motor traffic is not so much a local problem as it is a concern of the State, and in so far as it is a local problem, it should be noticed that the limitation of the requirement of local consent does not deprive the local authorities of power to make proper police ordinances.

The suggestion has been made that an effective way to deal with this problem would be to abolish the requirement of local consent. It has been asserted, however, that this would be too harsh, and that it does not appear that this would be necessary in order to eliminate the evils which have resulted from this

requirement. It has been suggested that the law should be amended to provide that in the event that any city or other local government or unit coming within the provisions of section 66 (1) refuses to give its consent to any operation whatever, the Public Service Commission shall be authorized, after a hearing, to issue a certificate of convenience and necessity without the requirement of such consent; or (2) attaches conditions to the granting of such consent which the carrier shall deem to be unjust or unreasonable, the Public Service Commission shall be authorized to issue a certificate of convenience or necessity upon such terms and conditions as it shall deem to be just and reasonable.

In order to avoid litigation, the kind of regulations which may be made by the local authorities could be specified by statute.

In addition, it has been suggested that all towns and villages coming by resolution under the terms of section 66 of the Transportation Corporations Law should be required to file notice to such effect with the Public Service Commission. This would enable the bus operator to learn without unnecessary inconvenience the villages and towns from which he should obtain local consents. The filing of these resolutions would also make it unnecessary for the operator to obtain certificates of non-adoption as now required by the Public Service Commission. A duplicate of the application for a local consent could be sworn to by the applicant and filed with the Public Service Commission. In case the local authorities do not either grant or refuse the application for consent within thirty days, their failure to act should stand as an approval of the application. There should be assurance that no consent would expire prior to the hearing for a certificate of convenience and necessity, provided the petition for such certificate is filed within a reasonable time after the grant of consent. Ninety days would appear to be a reasonable period. If the petition for the certificate is finally denied, after apportunity for rehearing and appeal, all consents should automatically expire.

Consents for intercity bus service could be transferable, and issued for an unlimited period. Power to terminate bus operations could lie in the Public Service Commission through its power to revoke the certificate of convenience and necessity.

It seems that local authorities could by statute be denied the power to make a charge in return for the granting of a consent. Such charges as are now made are in many cases a severe drain on the earnings of the operator (Cameron 2347-49). To meet such a charge would in many cases require a much more highly complicated system of accounts than the operators are in any way equipped to handle.

In perhaps no case do all the communities along the route receive payments which are proportionate, on whatever basis figured. Such a situation can hardly fail to result in local rivalries and demands from communities at present receiving no tribute. The fact that many local consents expire at an early date will furnish the opportunity for making excessive exactions. The alternative

to a refusal to meet the local demands is the abandonment of service in that community.

It is believed that the local communities should receive a payment from the bus operator. This charge could be in the form of a tax. The charge should be uniform and levied according to some index fixed by statute, such as route miles, bus miles, passenger miles, total passengers, etc.

There has apparently been no demand from the shipping public that motor carriers engaged in the transportation of freight be brought under the control of the Public Service Commission. Apparently no flagrant abuses of the contractual relations between the shipper and the carrier have arisen. It would seem, consequently, that there is at present no particular reason why motor trucks should be made subject to regulations as a public utility.

INSPECTION

The Public Service Commission is not now carrying on adequate inspection of motor buses. Members of the Commission assign their failure in this respect to a lack of staff. At the present time the work of inspecting motor buses is done almost altogether by not more than three men, who do not give full time to motor bus inspection but are also used for inspection of steam and street railways. Certain other members of the Commission's staff, while about the State on public business, are instructed to give such time as they can spare to a check-up of motor equipment (172-74; 177; 1137-40). One witness asserted that it is "a physical impossibility" for the Public Service Commission to make adequate bus inspections with its present force. He stated that his own corporation regularly employs not less than 5 inspectors for its own service (4260-61). The total number of buses operated by carriers under the control of the Public Service Commission at the present time approximates 1,400. In its annual report to the Legislature for 1928 (p. 45) the Public Service Commission requested that it be furnished with at least 6 additional men for purposes of inspecting motor and rail equipment.

SUMMARY

The following suggestions have been made to this Commission with regard to the regulation of motor carriers:

(1) Explicit statutory authority for regulation by the Public Service Commission of motor carriers in a separate legislative enactment.

(2) Provision on the Commission staff for an adequate number of inspectors for motor bus inspection.

(3) A certificate of convenience and necessity should be required from the Public Service Commission, and in this connection the Commission should have power,

(*a*) To refuse a certificate unless reasonable regulatory conditions are complied with in respect to franchise provisions.

(*b*) To revoke a certificate on failure to conform to reasonable regulatory conditions.

(*c*) To approve the transfer or assignment of a certificate.

(*d*) Cities, towns and villages along a bus route should be proper parties to a proceeding involving a certificate.

(4) The Commission should have the same authority as to rates and service as it now possesses over other utilities, including the power to approve securities, evidences of indebtedness or long term debts, outstanding or to be issued.

(5) As to buses operating through two or more local government units.

(*a*) The Commission should have power to issue a certificate of convenience and necessity without local consent if such consent is refused, or if unjust or unreasonable conditions are attached thereto.

(*b*) Consents for inter-city bus service should be transferable and for an unlimited period.

(*c*) Local authorities should not charge for granting the consent to inter-city buses but should receive a payment from the bus operator in the form of a tax.

(6) There should at present be no regulation of motor trucks as a public utility.

CONTROL OF PRIVATE WATER COMPANIES

There are 376 municipal and 232 private water companies operating in the State (State Health Dept. June 30, 1929).

Water companies now are not under the jurisdiction of the Public Service Commission. They are subject to a certain measure of control by the Water Power and Control Commission and the Department of Health. The Water Power and Control Commission may approve or reject plans for a water system; it may inspect the service before it is started and the Department of Health has authority to make periodic inspections of the water supply of any community in the State and may order changes in the method of operation.

After the company is under way, there is no control of rates, no regulation of service and a financial policy may be pursued which is opposed to the best interests of the community.

While there have been but few complaints concerning water companies there has been for some years a demand for regulation (Exhibit 110-A shows proposed legislation from 1914 to date). Letters were sent to all the private water companies and to the village presidents or town supervisors in the areas served, asking their attitude toward state control. Of 59 replies received from public officials, 43 stated that there should be regulation and of 34 officials of private water companies replying 26 were opposed to public regulation.

The nature of the private water company business within the last few years has been rapidly changing. This is due largely to the consolidation of various companies and the extension of holding company control. It is estimated that these companies serve 13 per cent of the population of the State. Although the service is a vital necessity, the only recourse against abuses is for the municipality to enter into competition with the private company. It has been urged that this would mean a considerable investment and duplication of service with resultant waste.

Due to the circumstances of local control through political action it has not been seriously contended that control should be exercised over municipal systems except that they be required to file an annual report and to install a uniform accounting system so that the actual costs of the water department and the municipal government be kept separate.

Based upon the practices in other states, of which 34 now subject water companies to the same control as other utilities and acting upon the recommendation of the Public Service Commission and the corporation counsels (pp. 1221, 3955) the following suggestions have been made:

Private water companies should be subjected to state control in regard to

(*a*) Rates. All tariffs for water should be placed on file with the Commission and the Commission should be given power to order changes.
(*b*) Service.
(*c*) Financing. The issuance of securities should be subject to the jurisdiction of the Commission.
(*d*) Uniform Accounts.
(*e*) Annual Reports.
(*f*) Suspension, Annulment or Cancellation of Certificate.
(*g*) Investigation of Complaints.

The Conservation Department should retain its present powers and should continue to issue the certificate of convenience and necessity with the proviso that the Water Power and Control Commission should certify the record of each company to the Public Service Commission when the company is ready to operate.

TELEPHONE COMPANIES BELOW $10,000 PROPERTY VALUE

At present all telephone companies not having a property value of $10,000, or which are not operated for profit, are not under Commission control (Ct. 49, Sec. 2, Par. 17). This removes from the jurisdiction of the Commission some 350 to 400 independent telephone companies. With the exception of farmer cooperative lines, these companies are found in small villages. They having working agreements with the New York Telephone companies as to tolls and long distance service. Many of them are in very prosperous condition.

In the case of complaints, the Commission has no power to interfere nor has it any means of determining when the property values of these companies exceed $10,000, but it would seem that the farmer cooperative lines should be left unregulated as they do not operate for profit.

It has been suggested, therefore, that these companies which operate for profit should be subjected to Commission supervision. This can be done by striking from Par. 17, Sec. 2, Ct. 49, the clause exempting telephone companies of less than $10,000 property value which operate for profit.

RURAL ELECTRIFICATION

Rural electrification constitutes one of the most important problems confronting the Public Service Commission. Every effort has been made to meet the needs of industry and power has been made accessible and at a reasonable cost. More recently attention has been turned to the domestic consumer and socalled promotional rates are being put into effect by the progressive companies. But comparatively little attention has been given to the farmer although agriculture is one of the most important industries of the state. The extension of electricity to the farmer will not only eliminate many of the hardships which surround rural life, but it may also positively increase the output of the farm. Much has been written on the increased comforts which electricity will bring to the farm home and at present attention is being given to the advantages of electricity to the agricultural industry. The reports of the Committee on the Relation of Electricity to Agriculture give concrete evidence of this. In order to effectively stimulate the industrial and commercial use of electricity on the farms, it is essential to facilitate new installations and to introduce promotional rates as has been proved. Such rates react favorably for the companies in building up the rural load.

There are three factors which enter into the costs of electricity on a farm. These must be considered in setting up any program of rural electrification.

1. Cost of power, including line extension charges.
2. Cost of wiring buildings.
3. Cost of equipment and appliances.

1. The cost of wiring the farm home and buildings is a matter of great importance to the farmer because he as a rule is not familiar with the technique employed and is at the mercy of the lighting contractor. Although this commission is not directly concerned with the problem, nevertheless, it was suggested that it be brought to the attention of the Legislature that lighting contractors should be subject to a license, in order to protect the areas outside

NOTE.—The treatment of this subject was taken from a memorandum prepared by Dr. F. G. Crawford of the Research Staff.

of municipalities. The cities have imposed standards already through the municipal bureau of buildings.

In the same way the cost of equipment is not a proper problem for this investigation, yet the establishment of credit corporations for the purpose of selling equipment on liberal terms would do much to encourage extensive use of electricity. It is unwise for the utilities to extend their credit facilities for equipment too far because the attendant risk is great and the utility will be forced to make decisions as to credit risks which may engender hostility to them. After all, the business of the utility is to supply electricity, not equipment. The cost to the farmer of his electricity is an item which may determine the wisdom of the investment for wiring and for equipment, and a full use of electricity is not approached in areas where the *total* cost of service is above 6c k.w.h. Total costs refers not only to the energy charge but to line extension charges as well.

The existing statute in New York provides that a gas or electric corporation must give service to persons living within 100 feet of the termini of their lines. Extensions up to 100 feet were made on application of the consumer, but if the distance was in excess of 100 feet the companies would make an investigation to determine the cost of the extensions requiring the consumer to share the cost of construction over and above a certain amount determined by the company. In other cases contractors, not associated with the utilities built lines for consumers who then sought service from the utility. Another modification allowed prospective consumers to furnish labor and materials thus reducing the amount required in cash. Contracts were based upon the peculiar conditions of the localities concerned. Many of these contracts are still in operation and in not a few cases certain consumers escaped payment of initial costs because they installed connections after the cost of line construction had been met by the first few dozen consumers. These earlier contracts and arrangements were the first steps in the development of a program of rural electrification.

The Public Service Commission normally approved of such contracts when they were brought to its attention. The guiding principle adopted by it was that rural extensions should not be subsidized by urban consumers; in other words, the rural lines should be self-supporting. Rural rates in many cases were so high that the number of customers was small and the amount consumed was limited. Many protests have been submitted to the Commission because of such charges.

Beginning about 1925, there was put into effect what is known as the Adirondack Plan. This plan was based on the proposition that the company was entitled to a fair return on the investment which it must make in order to make its line extensions into the rural territory, the return to be equal to the interest on the investment, the cost of doing business and furnishing the kilowatt hours consumed. This included an amount for retirement of the plant,

maintenance, taxes and the costs of the kilowatt hours furnished. The cost to the consumer may be split in three parts.

A. A minimum charge for consumers.

1. If there be only one consumer per mile the minimum charge would ordinarily be $24. per month. As the number of consumers per mile increased, the minimum charge is proportionately reduced.

2. An energy rate for the kilowatt hours actually used. If the energy charge does not equal the minimum charge, the minimum charge must be paid. If it exceeds it, the energy charge is paid.

B. A counted room or floor space charge.

C. A customer charge.

As the lines are developed, it is usually found that the minimum monthly bill ceases to be a factor and that the customer will use more than the minimum monthly charge.

THE OPERATION OF THE ADIRONDACK PLAN

The Adirondack Plan has been in operation for five years, 1925-1929, while the period for which comparable statistics are available is 1926–1929. The table below gives a summary of the growth of electrified farms from 1926 to 1929 and the national average for the years 1927 to 1929. On January 1, 1925, the number of farms in New York with central station service was 30,800. If we assume that the increase in rural electrification for the year 1925 was uniform with the later period, then approximately 25,000 farms had service previously to the installation of the Adirondack Plan.

Year	*Total No. of Farms*	[1]*With Central Station Service in N. Y.*	*Percent*	*Additional Farms within a Mile of Line*	[2]*Central Station Service in U. S.*	[3]*Percent*
Jan. 1, 1926...	188,754	30,800	16	36,600	.....	...
Jan. 1, 1927...	.....	35,600	18.5	.....	325,000	6.5
Jan. 1, 1928...	.....	42,000	22	.....	.....	...
Jan. 1, 1929...	.....	47,800	25	56,000	500,000	9.9
Jan. 1, 1930...	.....	50,060	28	.....	.....	...

The increase in the number of farms with central station service in New York from 1927 to 1929 was 12,200 or 34.2%, while the national increase was 175,000 farms or 53.8%. Although New York failed to keep pace with the national average, it must be pointed out in all fairness that New York stands second to California in the number of farms electrified. Contributing factors are that California has had the advantage of the irrigation load while

[1] Material from letter of C. H. B. Chapin, Secretary Empire State Gas and Electric Association.
[2] Committee on the Relation of Electricity to Agriculture, 1929 Report.
[3] From 1927 to 1929 the percentage increase in New York was 35.2% and for the Unitel States 53.8%.

in New York farm abandonment has gone on rapidly since the census of 1920. Thus the New York curve is beginning to flatten out and percentage increases will not reveal the true picture. The increase of the future will be slower because the most accessible farms are now electrified.

At present, in 85% of the area of the state, rates have been filed or are in the process of filing for the operation of the Adirondack Plan, or some adaptation of that plan.

CRITICISM OF ADIRONDACK PLAN

Mr. Morris L. Cooke (H. 4091) criticized the Adirondack Plan on two grounds, first, that it is a drifting plan and, second that it is a timorous one. By drifting he had in mind that the burden was placed on the consumer and that extensions of rural lines were not the result of planning, but rather a more or less haphazard development. No state wide policy of expansion had been outlined. By a "timorous" plan he meant that the costs were too high to encourage use. A more daring plan would lower costs to a point where electrical current would be used freely.

PROMOTIONAL RATES

Realizing the importance of increasing the rural load, the utilities have installed promotional rates in over 50% of the rural townships in New York. Electrification demands continuity of service, and, as the distribution of the load is improved, the utilities may service the rural area with greater profits. The promotional rates encourage wider use, increase the load and thus aid both the farmer and the company.

One illustration of promotional rates is found in the experience of the Mohawk Hudson Co. in the Cobleskill district. This indicates the possibilities of this type of rate. (Exhibit 203.)

The rate was introduced December 1, 1928 and during the year 1929. The number of farm customers increased 50.7 per cent while the average rate decreased from 11.6 per cent to 7.9 per cent.

	1928	*1929*	*Percent*
Number of customers	148	228	+ 50.7
Total kw.h.	65,229	131,146	+101
Average kw.h. per customer per year	441	588	+ 33.3
Total revenue	7,565.86	10,342.18	+ 36.7
Ave. rev. per customer	51.12	46.38	— 9.3%
Ave. rate per kw.h.	11.6c	7.9c	— 31.9%

Rural electrification is a very dynamic problem that is changing constantly. For this reason it is unwise to pass detailed legislation which may hamper its development.

FARM AND RURAL EXTENSIONS—AREA DEVELOPMENT

Most of the data on rural electrification has to do with statistics not alone from use of electricity on farms but also from small towns and villages. It is natural that attention should be paid to the development of centers of population and the farms in the adjacent neighborhood. The following data indicate that this has been done.

The extension policies of the utilities with line extension charges during the past five years and at present, have had the effect of developing the more accessible farms and the more settled territory. The utilities have operated on a basis of the number of users rather than on the use of electricity. They have apparently not discriminated between rural electrification and farm electrification and have failed to give special attention to the latter.

Computations made from statistics gathered by the Empire State Gas and Electric Association show that the average density of rural consumers per mile remained constant at 17+ from 1926 to 1928. The density increased from 1928 to 1929 from 17+ to 19+. During these same periods, in 1926 the average yearly use per customer was 460 kw.-hr. or 38 per month, in 1928, 658 kw.-hr. or 55 per month. In 1929 the average yearly use decreased to 590 kw.-hr. or 49+ per month. These figures apply to practically all the rural lines of the state.

A study made in 1926 by Dr. R. F. Buckman of the New York State College of Agriculture was directed to farm usage as distinguished from rural usage. It covered 335 farms in 50 counties of the state, and showed that the average yearly use on farms was 692 kw.-hr. or 57+ per month.

From this group, 122 farms showed an average yearly use of 600 kw.-hr. or 50 per month. In 1929 these same 122 farms were again studied and the average yearly use was found to be 955 kw.-hr. or 79+ per month.

These computations demonstrate the fact that the extension policy of the companies has emphasized the number of users and although they have increased the density per mile the average use among the mixed classes of rural consumers has decreased, while that among strictly farm customers has increased.

Dr. Buckman's study indicates the possibility of developing the use of electricity and shows that the farms are using more current than the rural group as a whole. This suggests the conclusion that some effort should be made to further extend lines to farms and to deal with the farm areas as such.

"Area development." As indicated in the previous paragraph, the more accessible areas have been developed under the Adirondack Plan because of the fact that an increase in the number of users per mile decreases the minimum charge for each user. An illustration is found in the town of Sennett, Cayuga County, where under the present development there are 10.4 miles of electric line which serve 123 customers out of a possible 153 who live on the line.

> "For those who live along the line, but do not have service, the principal reasons for not having service are financial. One man recently bought a farm and is heavily in debt and while

he wants electricity, he thinks that it is advisable to improve his financial status before making further investment. In other cases, the houses are occupied by old persons who have practically retired and who do not feel financially able to go to the expense of wiring the buildings and installing equipment. In other cases, the properties are in unsettled estates and no one wishes to accept the responsibility for electric installation. Another factor preventing some persons from using the service is the cost of wiring the premises. If a plan for financing wiring on the installment plan were available, as it is in some regions, some of those who have not made use of current would do so.

"Of the 123 families who have electric service only 93 have telephones indicating that electricity seems more essential than telephone service. Within the area, where electric lines are not already built, there are 185 possible customers. Of these 194 families, 94 have telephones. In order to serve all of these additional customers, it would be necessary to construct 29.9 miles of electric line which would give service to the people who are living on 44.6 miles of highway. If all of these lines were built, there would be about 40 miles of line to serve 338 possible customers. Based on experience in the area, 265 would be likely to take service.

"On the lines already built, there are nearly 12 customers per mile. On the suggested additions to the present lines, there would be about 5 customers per mile. If the entire area had applied for service at the same time, the number of possible customers per mile would be 8.4 and for the probable customers a density of about 6.6 per mile.

"On the lines already built, there are a larger number of residences and commercial services in proposition to the number of farms than in the area which is not already electrified. Lines are built where there is the most insistent demand for electricity and where the density of customers makes possible a low monthly minimum bill and little resistance to the cost of installation. If the areas having the greatest density of customers are served first, it will be increasingly hard to make electricity available to those in the more sparsely settled areas. If the entire area could be served as a unit there would be little hardship for anyone."[1]

[1] R. F. Bucknam, Power Lines in the Town of Sennett, Cayuga County, New York, Farm Economies, New York State College of Agriculture, February, 1930. pp. 1257–1258.

TABLE 1.—PRESENT DEVELOPMENT AND POSSIBLE EXPANSION OF RURAL ELECTRIFICATION IN THE SENNETT AREA, CAYUGA COUNTY, NEW YORK, 1930

	Number of electric lines	Number not on electric lines	Total number
Number of Farms			
Small	23	57	80
Average	13	61	74
Large	6	23	29
Total	42	141	183
Type of Farming			
Dairy	22	34	56
Poultry	2	2	4
General	18	105	123
Number of tenant houses	12	24	36
Number of residences	82	15	97
Number of commercial services	11	7	18
Condition of Buildings			
Good	73	92	165
Fair	6	61	67
Poor	1	31	32
Tenure			
Owners	83	128	211
Tenants	12	17	29
Number of Telephones	93	94	187
Number of Customers with Electric Service			
Now installed	123	...	...
Total possible number	153	185	338
Miles of highway	10.4	44.6	55.0
Miles of electric line	10.4	29.9	40.3
Density of Service per Mile			
Customers per mile	11.8	4.8*	6.6*
Number of possible customers	14.7	6.2	8.4

The illustration which is quoted from Dr. Buckman's study in Farm Economics for February, 1930, indicates the problem and shows the possibility for area development. Such a step would be a drastic departure but under the existing conditions in the state it is essential if farm electrification is to be extended. Such a step should involve careful selection in order to prevent electrification of areas which should be abandoned and reforested. Also provision should be made for the establishment of a minimum revenue per mile, which when reached nullifies all the line extension minimum and leaves the consumer on a regular urban rate.

In order to make effective the area development plan it is essential that the Public Service Commission supervise very carefully the establishment of these areas and the planning of the line extensions. This would necessitate setting up in the Commission a Rural Electrification Division on the same status as other divisions. This would require no increase of personnel with the exception of a Division Head. This man should be an expert from the point of view of the farm problem as well as of regulation. He should be deputized to hold hearings in these cases. Evidence could be taken from the utilities and from the prospective users.

This division should be granted funds for subsidized research so as to conduct a series of studies in cooperation with the utilities on line charges, financing development of appliances, etc.

* Estimated.

PART III

SUGGESTED AMENDMENTS BY THE PUBLIC SERVICE COMMISSION TO THE LEGISLATURE NOT INCLUDED IN OTHER SECTIONS OF THIS REPORT

1. Section 1 (the short title), the word "Commission" should be abolished. It seems to be superfluous.

2. In Section 2, subdivision 10 (definition of gas plant) insert the words "or mixture of both" after the word "manufactured." This would harmonize with Section 10 of Transportation Corporations Law.

3. In Subdivision 13, change the term "electrical corporation" to "electric corporation." Some amendment should be made in the body of this subdivision for no one seems to know the meaning with exactness and the courts have never agreed upon it.

4. Section 2, in a subdivision to be numbered "14" might be inserted here as follows: The term "gas and electric corporation" includes a corporation organized for both a gas and electric corporation. It would be necessary to renumber the subsequent subsections.

5. Section 5, (Jurisdiction of Public Service Commission) the figure "1" after the title should be deleted. It is obviously an error.

6. Section 5-a, (Jurisdiction of Transit Commission Subdivision 2.

> "To such portions of street railroads and stage or omnibus lines or routes which lie within such city, to the persons or corporations owning, leasing or operating the said railroads or stage or omnibus lines or routes."

The object of this amendment is to clarify the subdivision and to delete all of the matter contained after the word "provided" in the existing statute.

Section 7. (Secretary to the Commissions; minutes as evidence, etc.)

The words "typewritten or" to be before the word "printed" (referring to the minutes of the Commission and the minutes of the Transit Commission, etc.) in the body of the section.

Section 19. (Attendance of witnesses and their fees.)

Subdivision 1. (Subpoenas, etc.)

Insert the words "each Commission shall have power to issue subpoenas and subpoenas duces tecum"; before any of the subject matter of the subdivision and insert the words "or assistant secretary" after the word "secretary" in line 4.

Insert the words "except that a subpoena duces tecum shall be signed and issued only in the manner prescribed in the Civil Practice Act" after the words "person of full age" in line 5.

Insert the words "the same as in the case of a subpoena issued out of a court of record" after the words "shall be" in line 8 and strike out all matter beginning with the word "two" in line 8 and ending with the word "attendance" in line 13.

These amendments would settle all questions as to procedure and practice in the issuance of such subpoenas.

Subdivision 2. (Witness failing to appear, etc.)

Substitute for the words "the Commission may apply" in lines 7 and 8 of the second paragraph the words "application may be made by the Commission or any person aggrieved thereby." It is felt that this amendment is necessary.

Section 22. (Rehearings before Commission.)

If the words "but any such application must be made within thirty days after the service of such order, unless the Commission for good cause shown shall otherwise direct" after the word "therein" in line 4 were inserted and the sentence beginning with the words "An application" in line 8 and ending with the words "by order direct" in line 13, were stricken out, it is believed it would serve to expedite rehearings and permit final closing of cases with more expedition.

Section 33. (Publication of schedules, rates, etc.)

There are two obvious errors in this section, namely, the word "provision" in line 2 of subdivision 1 which should be "provisions" and the word "person" in line 25 of subdivision 2 which should be "persons".

Section 47. (Investigation of Accidents.)

A clear definition of the extent to which the reports of accidents and the report of the Commission's engineers as to the accident, are public records or confidential reports to the Commission, would be desirable.

Section 49. (Rates and services to be fixed by Commission.)

Subdivision 4.

The word "lessor" in the second paragraph of the subdivision is misspelled.

Subdivision 5. (Proceedings relating to joint rates, etc.)

Insert the words "made at a joint session" after the words "joint order" of this subdivision.

Section 53-2. (Electrification of railroads in certain cities.)

This section might be omitted from the law as it has been declared unconstitutional by the Federal Court. (16 Fed. (2d) 313.)

Article 4. (Provisions relating to Gas and Electrical Corporations.)

This title should be amended by changing the word "electrical" to "electric", and the word "electrical" should be changed to "electric" throughout the article.

Section 65. (Safe and adequate service; just and reasonable charges, etc.)

Subdivision 5.

The words "the purpose for which used" in line 4 might be qualified so as to prevent rates from being made for separate businesses, that is, rates solely based on the type of business conducted, rather than the use of current for either light, heat or power.

Section 67. (Inspection of Gas and Electric Meters.)

The requirements should be made similar. A provision might well be included for sealing meters of the rotary type, and for the testing of steam meters.

Section 67-a. (Charge for gas in cities of one million or more.)

This section might be omitted. The City of New York is the only city affected. The section has been declared unconstitutional by the United States Supreme Court.

Section 69. (Approval of issues of stocks, bonds, etc.)

The section might be amended by changing the words "ten years" to read "five years".

This would make Section 69 the same in limitation of period for reimbursement as is provided in Section 55 for common carriers, railroad corporations or street railroad corporations and in Section 101 for telephone and telegraph corporations. (See also Section 82 relative to steam corporations.)

Section 69-a. (Reorganizations.)

The words "nine and ten of the Stock Corporation Law" should be changed to "ninety-six and ninety-seven of the Stock Corporation Law".

Section 82. (Approval of issues of stock, bonds, etc.)

This section might be amended by changing the words "ten years" to read "five years". (See Sections 54 and 69.)

Section 82-a. (Reorganizations.)

The words "nine and ten of the stock Corporation Law" should be changed to the words "ninety-six and ninety-seven of the Stock Corporation Law".

Section 92. (Rate Schedules; power of suspension, etc.)

Subdivision 1. (Schedules of rates, rentals and charges.)

It is suggested that typed schedules as well as printed ones be permitted.

Section 101. (Approval of issues of stock, bonds, etc.)

The sentence beginning "No telegraph corporation or telephone corporation shall be required, however, to apply to the Commission for authority" in the body of the section, permits telegraph and telephone corporations to issue stock dividends since there is no prohibition in this section against it and the wording is entirely different from that contained in other sections of this statute relating to similar powers of other utilities. If it is intended to permit this, the section is all right as it stands, if not it should be amended.

Section 101-a. (Reorganization.)

Change the words "nine and ten of the Stock Corporation Law".

An amendment providing that substantial compliance by the commission with the requirements of the Public Service Commission Law should be sufficient to give effect to all its rules, orders, acts and regulations and they shall not be declared inoperative, illegal or void for an omission of a technical nature in respect thereto, or for the admission of testimony which does not meet strict rules of evidence, would be desirable.

An amendment providing that it shall be unlawful for any person, corporation, or motor transportation company, holding certificate of convenience and necessity from the commission, to cause, allow, or permit any motor propelled vehicle operated by such person, corporation, or motor transportation company to be driven by any person not properly qualiled and licensed therefor, would cover a matter of safety of operation which, from the standpoint of the Commission does not seem to be by present statute.

An amendment to the Public Service Commission Law providing that the Act shall be construed as a whole, but if any section, or part of section, shall be held by a court having jurisdiction to be void or ineffectual for any cause, it shall not affect the legality of the remainder, would be desirable.

Article 2. (Organization, General Powers and Location.)

The question of the Commission's jurisdiction in cases of new side tracks crossing existing highways should be defined.

(See Section 53 Public Service Commission Law.)

Article 3. (Construction, Operation and Management.)

Section 51. (Weight of Rail.)

This section seems obsolete in its present form.

Section 52. (Fences, Farm Crossings and Cattle Guards.)

This section ought to be amended to make definite and certain the Commission's jurisdiction in the matter of establishing farm crossings.

Section 52-a (Warning Signs.)

It would serve a useful purpose if a definite requirement with regard to furnishing approach warning signs at new crossings was written in this section, and further if replacement as well as maintenance were a continuing duty of the railroad.

Section 54. (Notice of Starting Trains, etc.)

It will be noted that in the center of the section and without apparently, any relation to the context, a provision relative to the discontinuance of railroad stations is inserted. It is suggested that this much used provision be taken out of this section and reenacted as a spearate section.

Section 54-a. (Full Crews for Certain Trains.)

When two or more locomotives are operated and coupled as light engines, the question of such operation and whether or not it is under the jurisdiction of the Commission as to safety, etc., is quite uncertain. This might be made definite.

Section 71. (Duties Imposed.)

Subdivision 1 and 4 are more or less obsolete. Subdivision 4 should be made applicable to all trains and all railroads.

Section 76. (Use of Stoves or Furnaces Prohibited, etc.)

This section might well be amplified to cover electric trains and gas-electric.

Section 89. (New Railroads Across Streets.)

This section provides that all steam surface railroads shall be so constructed as to avoid public crossings at grade, whenever practicable. It further sets forth the procedure in determining the manner of crossing.

It is suggested that the requirement of a determination within twenty days, as now set forth in the section, might be eliminated for it is not practicable to make a determination of the method of construction over or under crossings within such a restricted time. In the Commission's experience, an additional hearing is always necessary to be held for no other purpose than to comply with this requirement of the statute. Leave out the words in the third line "except additional switches and sidings."

Section 90. (New Streets Across Railroads.)

The same recommendation may be made as is set forth under Section 89, namely, the elimination of the twenty-day period.

Section 91. (Alteration of existing Crossings.)

It might be desirable to have a provision regarding the approval of the Commission as to all structures built over highways or railroads, and its approval as to structures built to replace unlawful structures required to be removed by a Court order.

Section 94. (Performance of work, division of Expense, etc.)

Subdivision 3. (Highways across railroads, division of expense.)

The provision with reference to a town is obsolete, as towns no longer participate in the cost of state or county highways.

Subdivision 4. (Changes in existing crossings or structures.)

The same amendment should be made as with respect to Subdivision 3, insofar as state county highways are concerned. The words "or the approaches thereto" might well be inserted after the word "structure" in line 2.

Subdivision 6. (Who shall do work—division of expense.)

To bring this in line with the Grade Crossing Eliminaton Act, the final approval of the Commssion should be required on all work ordered.

Subdivision 7. (Division of work, expense, etc.)

The provision with respect to joint contracts seems no longer necessary. The Commission should be given final approval of the work as in Subdivision 6.

Subdivision 8. (Accounting, etc.)

The same as Subdivision 6.

Article 4. (Consolidation, Lease, Sale and Reorganization.)

Section 148. (Lease and Conveyance of Roard.)

Insert the words "or any part thereof" after the words "lease of any such road" in the 17th line.

Article 5. (Street Surface Railroads.)

Section 184. (Abandonment of Part of Route.)

The matter of abandonment is hereinafter referred to.

Section 192. (Center Bearing Rails Prohibited.)

This section is obsolete. Practically all municipalities prefer a center bearing type rather than the one referred to under the section.

Also, Section 184 provides for the abandonment of part of a route of a street surface railroad and no similar provision is found relative to the abandonment of a portion of the route of a steam railroad. It is suggested that such a provision might be included.

Section 196 and 197. (Protection of Employees in Certain Counties.)

These sections provide for the protection of employees in certain counties, viz., Kings, Queens, Albany and Rensselaer. There seems no reason why special provision should be made for certain counties. It is suggested that the Public Service Commission be given the right to direct that all cars be constructed so as to give reasonable protection to employees.

Article 6. (Rapid Transit Act of 1875.)

Article 7. (Laws Repealed.)

This article contains a schedule of laws repealed.

CHAPTER 477 OF THE LAWS OF 1890

This chapter relates to the construction or reconstruction of bridges carrying the tracks of street railways and the cost thereof, etc.

The Railroad Law was, by Chapter 481 of the Laws of 1910, made Chapter 49 of the Consolidated Laws. During the same session (1910), this Chapter (477) was enacted. It amended the old Railroad Law (Chapter 565) of the Laws of 1890) by adding sections 113 to 119-a, inclusive. These sections were not included in the Consolidated Laws nor were they repealed by the enactment of those laws.

(See General Construction Law, section 100.)

It is suggested that these sections be reenacted as a part of the Railroad Law. That seems to be their proper place and will make them accessible to those who are examining the statute. They could well be placed at the end of Article 3 and be numbered 109 to 116, inclusive.

CHAPTER 478 OF THE LAWS OF 1910

This chapter amended Section 5 of Chapter 565 of the Laws of 1890 (the old Railroad Law). The situation is analogous to Chapter 477 of the Laws of 1910, as hereinbefore set forth.

Chapter 478 of the Laws of 1910 made certain additions to the old law. The section was renumbered 12 of the Consolidated Laws and did not contain the additions added by Chapter 478. By Chapter 492 of the Laws of 1914, Section 12 was amended to include these additions and the section was further amended by Chapter 546 of the Laws of 1928. As Chapter 478 of the Laws of 1910 has never been specifically repealed, and as there is some question whether the amendments of 1914 and 1915 can operate to repeal it by inference, it is suggested that it might now be specifically repealed.

BEAR MOUNTAIN BRIDGE

(Chapter 358, Laws of 1928)

This gives the Commission jurisdiction over the sinking fund for the retirement of bonds and obligations of the corporation owning the bridge and permits the charging of tolls to be charged with approval of the Commission.

HIGHWAY FROM WILMINGTON TO THE TOP OF WHITE FACE MOUNTAIN

(Chapter 422 of the Laws of 1929)

This section provides that the tolls to be charged for traveling over the proposed road shall be submitted to and approved by the Public Service Commission and that changes in such tolls must be approved by the Commission.

FIRE PROTECTION ON ENGINES OPERATING THROUGH FOREST LANDS

(Conservation Law, Section 50, subdivision 24)

This relates to the matter set forth in the title, and the Commission made an order on April 1, 1909, relative to the operation through forest preserves in the Adirondacks between April 15 and November 1 in each year.

VEHICLE AND TRAFFIC LAW

(Section 17)

This section refers to liability insurance of motor bus corporations operating under certificates granted by the Public Service Commission.

Section 17 of the Vehicle and Traffic Law requires persons or corporations carrying passengers for hire in motor vehicles to carry certain liability insurance. The section, however, excepts corporations operating under certificates granted by the Public Service Commission. In view of this exception, the Commission requires corporations operating under certificates to file with the Commission liability insurance of the amount and in the form required by said Section 17. The Commission has, however, authorized certain motor bus corporations to carry a different form of insurance; such rights have been given upon petition and after a public hearing, the company having shown its financial responsibility to pay claims of from five to ten thousand dollars and where the company carries what is known as "excess coverage" that will take care of excess judgments. Where such changes in the form of insurance have been authorized, the Commission feels that better protection is given to the general public.

SUGGESTED REPORT SUBMITTED BY SENATOR WARREN T. THAYER

[195]

COMMISSION REVISION

STATEMENT RELATIVE TO PROPOSED REPORT

The State of New York, under the present existing system, has been regulating its utilities for more than twenty years. A fair minded examination of the record of accomplishment in regulation of utilities during that period is convincing that (while the system may need remedial change and while the law providing the method of carrying out such system may require detailed amendments in order to effectively regulate utilities under modern conditions that were not contemplated when the law was originally passed) no changes or amendments in the statute underlying this system of regulation should be hastily conceived or recklessly attempted under the exigencies of political pressure, the promptings of inexperienced theorists or the insistence of publicity seekers.

My experience in the Legislature of the State of New York covering a period of many years, is such that I cannot fail to be alarmed at improperly considered attempts to interfere with matters which so vitally affect the finances and wellbeing of practically all of the citizens of the State.

The past record of legislative interference in utility matters, particularly in rate making, is not a good one. A striking example was the legislative action in 1923 in making mandatory a $1.00 rate for gas in the city of New York, less than six months after the Public Service Commission (as a result of extended investigations, public hearings with expert advice and assistance and time for deliberation) had made a rate of $1.15 applicable to most of the gas companies in the Greater City. Spurred on by an active campaign conducted by a New York newspaper and the promptings of the dominant political leaders in the city of New York, without any consideration of the essential facts the Legislature was coerced into passing a bill fixing the $1.00 rate. As a result, the gas companies were forced to seek relief in the Federal Courts and in 22 separate cases the statute was declared unconstitutional because confiscatory. The cost to the taxpayers of the State of New York for the defending these various cases has been estimated to be more than $5,000,000.

The net result was that the Federal Courts in passing on the constitutionality of the act, fixed valuations for the property of the companies that would enable them to demand a rate greatly in excess of the rate fixed by the Public Service Commission. The $1.00 rate never became effective and not a single consumer ever received any benefit from it. The rates actually charged, and now being charged, are the same rates fixed by the Public Service Commission.

Because of experiences such as these, and actuated solely by the desire to refrain from destroying one system of regulation until

I am convinced that there is a real need of change and an opportunity to devise a better system (and that the changes proposed are wise and proper):

I present the following report and recommendations in the hope that the Commission will give unprejudiced consideration to the entire situation to the end that political demands, undigested theories or untried ideas shall not result in the foisting of some new system of regulation on the people of the State of New York without a complete understanding of the entire matter and a common sense determination to remedy the situation in a manner which shall be for the best interests of consumers, investors and the citizens as a whole. I make these suggestions after thorough study of all of the record taken by the Commission and after an attendance at nearly every hearing and meeting held by the Commission.

W. T. THAYER

February 25, 1930

SUGGESTED REPORT BY SENATOR THAYER

APPOINTMENT AND AUTHORITY OF COMMISSION

This Commission was authorized by a special act which provided:

"Section 1. A temporary commission is hereby created, for the purposes herein specified, consisting of the temporary president of the senate and two members who may or may not be members of the senate appointed by the temporary president of the senate, the speaker of the assembly, and two members who may or may not be members of the assembly, appointed by the speaker of the assembly, and three other members appointed by the governor. Vacancies in the commission occurring from any cause shall be filled by the officer authorized to make the original appointment.

Section 2. The commission shall have power to elect a chairman and vice-chairman from its membership. The commission shall have power to compel attendance of witnesses and the production of books and papers, to such extent as may be reasonably necessary in the performance of its duties, and shall otherwise have all the powers of a legislative committee as provided by the legislative law, including the adoption of rules for the conduct of its proceedings. The commission shall have power to appoint and at pleasure remove a secretary, counsel, clerk, stenographers and such other assistants as it may deem necessary, and to fix their compensation within the amount of its appropriation.

Section 3. The duty of such commission shall be to make a thorough survey, examination and study of the public service commission laws of this and other states, for the purpose of ascertaining whether the public service commission law of this state accomplishes the objects for which the system of state regulation was established, and for determining what amendment or revision of the public service commission law is essential to guarantee to the public safe and adequate service at just and reasonable rates, to the stockholders of public service corporations a fair return upon their investments, and to bondholders and other creditors, protection against impairment of the security of their loans; to recommend to the legislature any remedial or other legislation with relation thereto which it may deem proper as a result of its survey, examination and study; and to formulate and preparae or cause to be prepared a draft of any proposed legislation which may be recommended by it with reference to this subject.

Section 4. The members of such commission shall receive no compensation for their services, but shall be entitled to their actual and necessary expenses incurred in the performance of their duties.

Section 5. The commission may hold public hearings from time to time as the progress of its work may warrant, and shall make a report of its proceedings, together with its recommendations to the legislature on or before the first day of March, nineteen hundred and thirty.

Section 6. The sum of forty thousand dollars ($40,000) or so much thereof as may be necessary, is hereby appropriated out of any moneys in the state treasury not otherwise appropriated for the expenses of the commission created by this act. The money so appropriated shall be paid out of the state treasury on the certificate of the chairman of the commission, after an audit by and on the warrant of the comptroller.

Section 7. This act shall take effect immediately.

Personnel

The legislative members of the Commission were:

Senator John Knight (Chairman)
Senator Warren T. Thayer
Senator William J. Hickey
Assemblyman Horace M. Stone (Vice Chairman)
Assemblyman Joseph A. McGinnies
Assemblyman Russell G. Dunmore

The Governor appointed the following members:

Frank P. Walsh
James C. Bonbright
David C. Adie (Secretary)

Counsel and Research Group

The Commission selected William J. Donovan of New York City as its Counsel.

The Commission engaged the services of Professor W. E. Mosher of Syracuse University to act as Director of its Research Staff.

Sessions

The first meeting of the Commission was held at the Bar Association in the City of New York on July 15, 1929, at which a most comprehensive program was adopted (Record, 1st session).

Forty-three subsequent sessions were held at the Bar Association and the Aldermanic Chambers in the City Hall, New York City; two sessions were held in the Supervisors' Chambers in the County Court House of Erie County at Buffalo on December 18 and 19; and one session was held in a Court Room in the Onondaga County Building at Syracuse on December 20.

Witnesses

Ninety-four witnesses appeared and testified before the Commission; more than 5,900 pages of testimony being taken and more than 200 exhibits received.

Although the statute appointing this Commission declared that it should be its duty to make a thorough survey, examination and study of the Public Service Commission Laws of this and other states,

> "for the purpose of ascertaining whether the Public Service Commission Law of this state accomplishes the objects for which the system of state regulation was established, and to determine what amendments or revisions of the law are essential to guarantee to the public safe and adequate service at just and reasonable rates and to the stockholders of public service corporations a fair return upon their investments, and to bondholders and other creditors protection against the impairment of the security of their loans and to recommend to the legislature any remedial or other legislation with relation thereto * * *."

much testimony was taken which cannot be said to be applicable to any of the foregoing. The Counsel and Secretary of the Utility Consumers' League, the former Counsel for the Public Committee on Power, the Chairman of the Executive Committee of the Community Councils, two Executive Directors of the League for Industrial Democracy, a former Deputy Commissioner of Water Supply, Gas and Electricity, the President of the Community Councils and various other persons whose testimony mainly bore upon the personnel of the Public Service Commission, were heard as witnesses. More than 600 pages of the record were devoted to such testimony and it was shown that questionnaires had been sent broadcast in the city of New York under the direction of certain of these witnesses seeking complaints against the personnel of the Public Service Commission and its administration. Examination of this testimony indicated no charges of corruption nor any attack upon the character or integrity of any member of the Commission or of its staff. The claim was made that certain members of the Commission were prejudiced in favor of untilities, and it was shown that the Community Councils of the City of New York had endeavored unsuccessfully on previous occasions to have the present Chairman of the Commission removed by the Governor. The report of Counsel to this Commission makes no attempt to comment on the "criticism of the representatives of the Community Councils and other witnesses."

The matters of major importance covered in the investigation conducted by this Commission are:

1. Regulation of public utilities in the State of New York.
   - (a) Prior to 1907.
   - (b) From 1907 to date; present law.
2. The Commission and its Duties.
   - (a) Personnel and staff of present Commission.
   - (b) Jurisdiction of Commission.
   - (c) Utilities under Commission jurisdiction.

3. The administration under the Public Service Commission Law by the present Public Service Commission (1921–1929).
   (a) Regulation of rates.
      1. Valuation.
         a. Present methods.
         b. Proposed methods.
      2. Rate of return.
      3. Practice in rate cases.
4. Utility mergers—Holding companies.
   (a) Reorganizations.
   (b) Transfers of franchises.
   (c) Sales of property.
   (d) Sales of stock.
   (e) Management, construction and finance companies.
5. Court review of Commission determinations.
6. Rights of municipalities under Public Service Commission Law.
7. Capitalization and security issues.
8. Regulation of motor bus operators.
9. Grade crossing elimination.
10. Miscellaneous matters.
   (a) Sub-metering and conjunctive service.
   (b) Private water companies.
   (c) Telephone companies.
   (d) Rural rates.
   (e) Rural electrification.
   (f) Commerce court.
   (g) Separation of Commission into judicial and administrative divisions.
   (h) Uniform rates—service charge.
   (i) People's counsel.
   (j) Public ownership.
   (k) Transmission of power—interstate.

1. REGULATION OF PUBLIC UTILITIES IN THE STATE OF NEW YORK

(a) Prior to 1907

While the right of government to regulate business affected with the public interest has been recognized from time immemorial the real beginning of regulation in the State of New York dates from the year 1907. Regulation prior to the year 1907 was under special acts of the Legislature. Up to that time no regulatory tribunals were created except a Commission of Gas and Electricity and a Board of Railroad Commissioners. This last body had very limited jurisdiction.

(b) From 1907 to Date; Present Law

In 1907 a special message was sent by Governor Charles E. Hughes to the legislature urging the creation of a Public Service Commission. This Commission was to act as the agent of the legislature of the State of New York in the regulation of the public utilities doing business in the State.

The powers which Governor Hughes recommended should be given to such a Commission were:

1. To act upon its own initiative as well as upon complaint;
2. To pass upon the issues of stocks and bonds;
3. To examine properties, books and accounts;
4. To require detailed reports in prescribed form;
5. To prescribe reasonable rates;
6. To require adequate and impartial service;
7. To provide for the safety of employees and for the protection of the public;
8. Generally to direct whatever may be necessary or proper to safeguard the public interests and to secure the fulfillment of the public obligations of the corporations under its supervision.

(Record, pages 39–40)

The various existing regulatory tribunals in the state were combined into Public Service Commissions for the First and Second Districts by Chapter 429 of the Laws of 1907.

Thereafter there was a Transit Construction Commission created for the City of New York and a change in the Public Service Commission for the First District. In the year 1921 the First and Second District Public Service Commissions were succeeded by the Transit Commission with limited jurisdiction in the City of New York and by the present Public Service Commission of the State of New York with authority over all utilities in the State except certain matters connected with the transit corporations in the City of New York. The Legislature in 1924 established a Board of Transportation for the City of New York and in the year 1926 after consolidation of State departments the Public Service Commission and the Transit Commission were grouped in a Department of Public Service divided into a so-called Metropolitan Division (Transit Commission) and a State Division (Public Service Commission) which is as these regulatory bodies presently exist.

The statute providing for the appointment of the present Public Service Commission (chapter 134, Laws of 1921) provided:

"* * * * * * * * *

Sec. 4. Public Service Commission established; appointment; removal; terms of office. There shall be a public service commission, which shall possess the powers and duties hereinafter specified, and also all powers necessary or proper to enable it to carry out the purposes of this chapter. The commission shall consist of five members, to be appointed by the governor, by and with the advice and consent of the senate. A member of the commission designated by the governor shall, during his term of office, be the chairman of the commission. Upon the appointment of a successor to the chairman, the

governor shall designate such successor or another member of the commission as chairman.

The term of office of a commissioner shall be ten years from the first day of February of the calendar year in which he shall be appointed, except that the commissioners first appointed shall be appointed for such terms that the term of one commissioner shall expire on the first day of February, nineteen hundred and twenty-three, and the term of one commissioner shall expire on the first day of February of each second year thereafter. Vacancies shall be filled by appointment for the unexpired term.

* * * * * * * * *"

2. THE COMMISSION AND ITS DUTIES

Frequent changes in personnel mark the history of the Public Service Commission. For example, the Commission appointed in 1921 was:

William A. Prendergast, Chairman,
William R. Pooley,
Charles Van Voorhis,
Oliver S. Semple,
Charles G. Blakeslee.

Charles G. Blakeslee was succeeded in 1923 by James A. Parsons, who served slightly more than a year and was in turn succeeded by George R. Van Namee. Oliver C. Semple was succeeded in 1925 by George R. Lunn. Charles Van Voorhis was succeeded in 1927 by Neal Brewster. The history of the former Public Service Commissions, First and Second Districts, also shows many changes in the personnel.

RECOMMENDATIONS

A study of these changes in personnel shows the limited average tenure of service under the present method of appointing commissioners, and a marked tendency to consider such appointments in the nature of political awards. It is clearly evident that remedial legislation is indicated.

1. Determining the Commission to be bi-partisan, and that not more than three of the five members shall be of the same political party.

The records of the legislative sessions of 1907–1909 indicate that it was the intention in the enactment of the original law that members of the Commission should receive salaries sufficient to insure the employment of their entire time on Commission work and hold office long enough to make the position attractive to those of the highest ability and competence.

2. Salaries of Commissioners Should be Increased

Present conditions make it evident that a change in the manner and method of removal of commissioners as expressed

in the present statute should be made so as to provide that a commissioner could not be removed except on charges and after hearing by the body which is now required to confirm his appointment.

3. The Statute Should be amended in This Respect

To permit political influence or motives to be the main purpose in the appointment or removal of members of the Public Service Commission is to destroy any attraction which the position might have for capable men and to make the office a matter of political patronage.

(a) Personnel and Staff of Present Commission

The Commission functions with the present staff:

Commissioners and secretaries		9
Executive officer		1
Secretary and staff		4
Administrative—		
Albany office	33	
New York office	16	
		49
Engineering—		
Albany office	65	
New York office	89	
		154
Accounting—		
Albany office	40	
New York office	6	
		46
Legal—		
Albany office	7	
New York office	4	
		11
Total		274

(b) Jurisdiction of Commission

An exhibit (No. 4) was furnished setting for the general jurisdiction of the Commission. Its size forbids inclusion in this report. Briefly stated, the jurisdiction of the Public Service Commission under the present law has to do with

I. Decision of Jurisdictional questions.
II. Rate Making.
III. Fixation of Rates.
IV. Service.
V. Return.
VI. Issuance of Securities.
VII. Rate Schedules.
VIII. Special Statutory Duties.
IX. Discrimination.
X. Accounting Procedure.

(c) Utilities Under Commission Jurisdiction

There were on June 30, 1929, twenty-five classes of utilities subject to the jurisdiction of the Public Service Commission of the State of New York. They numbered 896 separate utilities as follows:

Steam railroad corporations	121
Street railroad corporations	69
Express companies	3
Sleeping car companies	1
Baggage and transfer companies	23
Stage coach and Omnibus corporations	293
Stock yard companies	1
Freight terminal corporations	3
Bridge companies	1
Electrical corporations	165
Coal gas or water gas corporations	30
Coal gas or water gas and electrical corporations	26
Water gas, natural gas and electrical corporations	2
Natural gas corporations	33
Electrical and natural gas corporations	1
Coal Gas or Water Gas and Natural Gas Corporations	7
Acetylene Gas Corporations	2
Gasoline Gas Corporations	1
Steam Corporations	8
Telephone Corporations	102
Telegraph and Cable Corporations	4
	896

3. THE ADMINISTRATION UNDER THE PUBLIC SERVICE COMMISSION LAW BY THE PRESENT PUBLIC SERVICE COMMISSION (1921–1929)

The record shows that the Public Service Commission considers and determines an average of 949 formal cases and 11,632 informal matters each year. Such formal cases equate to an average received and disposed of, of more than 3 per day for each working day in the year and an average of more than 40 informal complaints daily. A complete analysis of all formal cases and informal complaints, various forms of orders, as well as the closed cases showing the average number of hearings held, the number of witnesses and the time consumed by the Commission in its determinations, was presented.

The Public Service Commission has also taken part in 63 railroad service and rate cases of the Interstate Commerce Commission, 25 railroad merger cases, 20 applications for certificates of convenience and necessity or orders of abandonment and 268 capitalization matters, all held by the Interstate Commerce Commission. or jointly with the Interstate Commerce Commission.

By statute the Commission is authorized to begin investigations on its own motion after the service of notice on a utility or municipality affected. There were 210 of such proceedings begun on motion of the Commission and carried to a conclusion during the period 1921 to 1929. Of such investigations, 40 referred to rate matters, 34 to practices and 30 to service. The balance referred to reports and information and failure to follow prescribed methods of accounting.

The Commission maintains a tariff and rate department which in the last 19 months examined, digested and published 16,399 tariff schedules and changes, including 595 reductions in gas and electric schedules and 618 special permission orders. In a single calendar year 15,738 of such tariffs and changes in tariffs were considered by the Commission.

The Commission issues forms for tariff schedules, special permission orders, rules and regulations governing safety of operation of various utilities, devises standards and prescribes and amends uniform systems of accounts for all utilities. A considerable number of exhibits were furnished relative to these duties of the Commission.

A large part of the work of the Public Service Commission during the period 1921 to 1929 had to do with motor bus regulation. The Commission held public hearings and acted in 1456 applications for certificates of public convenience and necessity, or an average during the 8 year period of 192 per year. The Commission now receives reports and has under its jurisdiction 292 certificate holders, many of the certificates originally having been assigned and combined with other routes.

During the eight year period the Commission has tested each year an average of more than 612,500 gas meters; taken 10,366 tests of the heating value of gas; made 5400 sulphur, ammonia and pressure tests of gas and more than 50 plant inspections. An average of 280 electrical appliances have been tested and inspected each year, 426 meters tested and 763 plant inspections made upstate. During the same period 3017 inspections of railroad track and more than 40 inspections per year of railroad locomotives were made. A yearly average of 14 inspections of industrial locomotives, 31 inspections of electrical railroads, 7 inspection of bus lines and 52 inspections and investigations of train delays have been made.

One of the principal reasons for the enactment of the present Public Service Commission Law was the widespread overcapitalization and "watering" of stock in the public utility field. It will be recalled that prior to 1907 the term "watered stock" as referring to the securities of many public utilities was a common occurrence in the newspapers. Since the enactment of the Public Service Commission Law that term, as applicable to the securities of utilities operating in the State of New York, has disappeared from the public print. During the past 4½ years only, that is, January 1, 1925, to June 30, 1929, the Commission has authorized the issuance of $728,767,235 in common and preferred stocks and $360,398,878 in bonds for the various utility corporations in the State

of New York. The average amount of securities authorized in the more important capitalization matters coming before the Commission is in excess of 17,000,000 per corporation.

For all utilities in the State of New York the average of common stock issued per corporation was 52.59%; the average of preferred stock is 6.69% and the average long term securities issued per corporation was 40.72%.

During the period 1921 to 1928 the complete total of final orders made by the Commission was 11,440. In only 46 of these proceedings was Court review begun. Of these, 12 matters were discontinued before Court hearings were held, so that of the 11,440 orders only 34 were actually reviewed by the Courts. In the Appellate Division of the Supreme Court the Commission's determinations have been reversed in 6 cases and affirmed in 14 cases. In the New York State Court of Appeals the Commission's determinations were affirmed in 8 proceedings and reversed in 3 proceedings. In the United States Supreme Court the Commission has had one affirmance and one reversal. So that of all of the final determinations made by the Commission, only 34 cases have actually been reviewed by any court, of which 23 were affirmed, 10 reversed and one is pending undetermined in the United States Circuit Court of Appeals. Expressed in another way, less than one out of one thousand Commission determinations have been reversed by the Courts during the past eight years.

Up to November 1, 1929, the Commission has made final orders in 375 Grade Crossing Elimination cases affecting 663 crossings; has determined elimination to be unnecessary in 381 proceedings affecting 486 crossings. These figures relate to work ordered under the present Grade Crossing Elimination Act which has only been in effect a little over two years. The estimated costs of grade crossing eliminations already ordered is $84,805,510; 114 projects have been completed and 52 are now actually under contract. On December 12, 1929, the Chief Engineer of the Commission testified that 21 additional projects were about to be put under contract.

RECOMMENDATIONS

When any public body is charged with extensive duties such as the foregoing show are delegated to the Public Service Commission, the extent and scope of the work performed must of necessity be dependent upon the number and qualifications of the personnel of such public body. (See Recommendations 1 and 2).

To fully and completely discharge all of the duties would require a staff of employees greatly in excess of the number now employed and it is possible that even of such a staff were provided by the legislature, other and more detailed duties might appear desirable, requiring further enlargement in the number of employees. A line must be somewhere drawn.

On the record taken before this Commission, however, there is no question that the growth in the personal or the compensation of the employees has in no wise kept pace with the growth in the required duties of the Commission.

4. Provision should be made for the adoption of a definite salary program and policy with due regard to the rewarding of continuous service.

The Commission should be directing by statute to prepare and submit a definite program extending over a period of years, with maximum and minimum salary grades subjects to the rules of the civil service commission of the State of New York.

Merger and consolidation of corporations, particularly in the electrical field, with the resulting applications for authority to issue various classes of securities and the necessary examination and rewriting of the books and accounts, before such authority can be granted under the existing statute, has put a strain on the accounting division of the Commission with which its present staff can hardly cope.

RECOMMENDATIONS

5. At least ten additional accountants for the purpose of expediting the routine work of the acounting division of the Public Service Commission should be made possible by legislative action.

The growth in motor bus transportation (unforeseen when the present law was enacted), gives rise to the necessity of additional inspection if the public is to be protected against unsafe and improper vehicles and methods of bus operation. The vastly enlarged program for grade crossing elimination resulting from the $300,000,000 bond issue requires additional engineers if this work is to be carried on expeditiously and the money advantageously and wisely spent.

6. The employment of at least four engineers fitted by technical education to undertake grade crossing work, and four engineers (inspectors) should be made possible by legislative action.

It is undoubtedly a fair criticism to make of the work of the Commission that its present staff is inadequate to promptly check additions and retirements of plant and property of utilities and to spot-check physical units of plant and property in the field in rate proceedings.

7. The employment of at least two engineers (valuation) should be made possible by legislative action.

(a) Regulation of Rates

The law provides that operating utilities shall initiate rates and that upon the filing thereof the Commission has the power to approve the rate, disapprove it, or to order a superceding rate.

The Commission likewise has authority to initiate a proceeding on its own motion for the purpose of determining whether or not a filed rate is just and reasonable. Definite limitations are fixed

on the period of suspension of rates by the Commission pending its determination.

It was stated by all Commissioners that the pertinent facts in every rate case are investigated, even if there is no appearance in opposition to the utility. While the general public is not required to be notified of any change in rates, the law requires notice to be given by advertisement in certain newspapers and the Commission, in addition, publishes a weekly tariff bulletin distributed throughout the state containing all changes in rate schedules.

RECOMMENDATIONS

8. The law should be amended requiring every utility proposing an increase in rates to enclose with its bill delivered to each consumer a statement of the proposed rate change and its applicability to the type or the amount of service or commodity furnished to the ratepayer and the effect of such change as to such individual user.

9. The Mayor, Corporation Counsel and the City, Village and Town Clerks, as the case may be, of every municipality within which a utility operates, shall be notified of any proposed rate change which affects its consumers within such municipality.

1. Valuation

(a) Present Methods

The Public Service Commission of this state has taken the position that each case involving a valuation must be decided on its own merits and the decision as to valuation made dependant on the facts in the case under consideration.

The Commission has kept in touch with the operating companies and has conducted negotiations with companies when it had been determined that the relation of their earnings to book values indicated they were earning more than a fair return.

In many instances these negotiations have resulted in a decrease of rates and most members of the Commission defended the practice, and believed that it had led to satisfactory results from the consumer's standpoint.

In arriving at valuations in rate proceedings the Commission has frequently spot-checked inventories and estimates submitted by companies and municipalities and has endeavored to follow the decisions of the United States Supreme Court and the New York State Courts as to the consideration to be given the various elements of value, including cost of reproduction less accrued depreciation, original cost and every other element. The record indicates that the Commission has given much weight to original cost and the valuations in rate cases submitted in the record show that in nearly every instance such rate bases have been substantially below the claims submitted by the companies.

Witnesses for the Public Service Commission defended the method of valuation pursued by the Commission and insisted that it was necessary in arriving at valuations for public utilities to follow the decisions of the Court and what Chairman Prendergast, when testifying as a witness, termed "the law of the land."

(b) Proposed Methods

Several plans were suggested for the consideration of the Commission relative to new or proposed methods of valuation.

The Bauer Plan

Dr. John Bauer, an employee of the Investigating Commission, proposed a plan which had been previously developed by him in books and magazine articles which required that a legislative valuation be made of all public utilities as of some fixed date. Such valuations were to be made under the authority of the statute, and, in the language of Dr. Bauer, were to be fixed with due regard to the principles laid down by the United States Supreme Court. After proper adjustment they were to be maintained by legislative mandate by the inclusion of net additions at actual cost and a fixed rate of return was to be applied as long as any unit of property remained in service. For certain new property to be added, the rate of return was to vary, depending upon the market cost of additional capital as determined by the Commission.

Dr. Bauer insisted that his plan would undoubtedly be upheld by the Courts if properly instituted, although nearly every other witness who testified as to the plan believed that it would be confiscatory and unconstitutional. It was stated by Chairman Prendergast that he was of opinion that the Bauer plan advocated a rule of valuation to be substituted for the Court's anounced rule of "present value." He believed, in common with other witnesses, that the constitutional right of utilities to claim a return upon present value as of the time of fixation of the rate base could not be taken away or changed by state legislation.

The Prendergast Plan

Chairman Prendergast presented a plan of valuation which was referred to in the record as the "Prendergast Plan." He advocated that at any given date a rate base could be determined for any utility by separating the dollars of actual cost of all fixed property (except land) as of the year when the property represented by such dollars had been installed and written in to the utility's books. He proposed that all property installed prior to June 30, 1917, be converted into dollars of the date of the fixation of the rate base by the use of a proper set of index numbers, preferably based on the index numbers of the United States Bureau of Labor Statistics. That the actual cost of all units of property (except land) installed subsequent to June 30, 1917, should be included at the dollars of actual cost. That to these two groups of figures should be added the market value of land as of the date of the fixation of the rate base. That observed depreciation should then be deducted and that proper amounts be determined by the Commission for working capital and going value. That these two latter items should be

treated as questions of fact to be determined by the Commission. That a reserve for depreciation if accumulated on the straight-line basis should be taken into account and the excess, if any, over the amount of a proper reserve, should be also be deducted. That a rate of return, say 7 per cent, should then be permitted on the rate base and that the rate base should thereafter be bi-annually fixed by the Commission by the use of index numbers for all property remaining prior to June 30, 1917, and by actual cost for all property installed subsequent to the previous rate base determination. That at the time of the bi-annual fixation of the rate base, complete examination should be had of the amounts earned by the company, and if any amount in excess of a fair return should have been earned, one-half should be permitted for the future to be retained by the company and the other half applied to the reduction of rates.

It was insisted by Chairman Prendergast that the latter feature (similar in many respects to the English Gas Rate System) would serve to reward efficiency and economy in management and was an integral part of his valuation scheme.

Chairman Prendergast seemed to believe that the fairness of the plan would appeal alike to the utilities and to consumers and that most utilities would be willing to co-operate in giving the plan a trial.

Dr. Bauer and various other witnesses objected to the plan because of the generally expressed fear that utilities would not make a voluntary agreement to pursue it and that the propriety of any use of index numbers was not to be assumed.

The Massachusetts Plan

It was stated by two witnesses representing the Massachusetts Public Utilities Commission that the State of Massachusetts had a policy of fixing valuations according to "prudent investment." It was apparent, however, from their testimony, that the state of Massachusetts has endeavored to fix rates based on the actual investment raised by the sale of securities under the supervision and direction of the Commission. It was also apparent that what has been followed in the state of Massachusetts has been to permit a rate of return based on the capital stock issues and that the system has been extremely successful for more than one hundred years in that state. There seems to be nothing in the record to contradict or criticize the wisdom of the plan in so far as its applicability in Massachusets is concerned.

Other Plans

Various other witnesses, including former President Hadley of Yale University, who advocated the theory of charging what the traffic would bear, Mr. Donald Richberg, who advocated a modified form of public ownership, others who suggested that rates be based upon a guarantee of a minimum return by the state, and others who proposed modified forms of the same suggestions, were heard.

Some statements were made relative to the device of establishing by compact with utilities or otherwise (probably as to all future utilities and as to all future investments in existing utilities) an agreed rate base and an agreed rate of return. This plan was criticized by those who believed that compact valuations or rates of return or rate bases fixed by contract and made effective by any single legislature would necessarily be unconstitutional in that they would attempt to preclude and prevent future legislatures from adopting a rule of present value in the event that prices suffered a decline.

2. Rate of Return

The record shows that the Commission has followed a consistent policy of permitting utilities to earn rates of return of between 7 and 8 per cent and that in most instances 8 per cent has been allowed. In some important cases, notably the New York Telephone Company proceeding before the Commission, three Commissioners favored 7 per cent as a rate of return and two Commissioners favored 8 per cent.

In explaining the position as to rate of return, the members of the Public Service Commission seemed to feel that they were bound by the decisions of the Courts as to what constituted a proper rate of return. An exhibit was presented on behalf of the Commission showing the number of cases where less than 8 per cent had been permitted and also showing a number of cases where former Commissioners had permitted returns in excess of 8 per cent. No rate of return in excess of 8 per cent seems to have been permitted by the present Public Service Commission.

RECOMMENDATION

10. No valuation, rate base or rate of return fixed by legislative fiat will survive a drastic change in price levels or in the purchasing power of the dollar. If this be true, and past experience would indicate that it is, then no plan which does not coincide with the law of valuation, fixation of rate base and a rate of return as enunciated by the Courts of the State of New York and of the United States, should be made or attempted to be made.

11. Any plan which can approach the subject by short term contract or agreement, either in the form of provisions as to future investments or a graduated rate of return, should be left to the discretion of the regulatory body and attempted to be put into practice so that the result of such experience, if beneficial, may be utilized in the future.

3. Practice in Rate Cases

Certain complaints were made by the Utility Consumers' League, an organization represented by the witness Hotchner, to the Commission, and some of the signers of such complaints had requested that their names be withdrawn, decreasing the number below the

statutory requirements. The Commission then returned the complaints, they had been re-signed by other consumers, returned to the Commission, then names were again withdrawn, reducing the number of signers below the number required by law.

The record showed that these withdrawals had been, as a matter of fact, procured by agents of the Long Island Lighting Company. It did not appear that the Commission was aware of any impropriety in the withdrawal of names from these complaints and it appeared affirmatively that other complaints had been previously returned because of withdrawal of names. It was urged by Chairman Prendergast and others that the Commission could not legally consider rate complaints lacking the requirements prescribed by the statute as to number of signers.

It was also shown that the Indiana Commission, acting under a similar statute, had, by recent decision, held that it was beyond its power to consider complaints from which names had been withdrawn so that the number finally left was less than the number required by statute.

Notwithstanding, it is felt that the Commission is subject to criticism for permitting such a practice to exist and it is accordingly made as a

RECOMMENDATION

12. That the law be amended to provide, in all cases where names are withdrawn from complaints against utilities that the Commission shall satisfy itself by investigation and public hearing that the withdrawal of such names was proper and that the complaint is without merit, before the proceeding shall be closed on the records of the Commission.

4. UTILITY MERGERS—HOLDING COMPANIES

Reorganizations.
Transfers of franchises.
Sales of property.
Sales of stock.
Management, construction and finance companies.

In his message to the Legislature on January 2, 1907, Governor Hughes, in recommending enactment of the Public Service Commission Law, stated, among other things:

> "Its power should be clearly defined and should embrace the power to act upon its own initiative as well as upon complaints; to pass upon the issuance of stocks and bonds, * * *."

In carrying out the recommendations of the Governor, the Legislature of 1907 enacted the Public Service Commission Law (L. 1907, Ch. 429) which became effective July 1, 1907.

It will be noticed that a proposed power first enumerated was "to pass upon the issue of stocks and bonds."

A typical provision with respect to the authorization of issues of stock, bonds or other forms of indebtedness by a public utility corporation is as follows:

> "A gas corporation or electrical corporation organized or existing, or hereafter incorporated, under or by virtue of the Laws of the State of New York, may issue stocks, bonds, notes or other evidence of indebtedness payable at periods of more than twelve months after the date thereof, when necessary for
>
> the acquisition of property,
>
> the construction, completion, extension or improvement of its plant or distributing system, or for
>
> the improvement or maintenance of its service, or for
>
> the discharge or lawful refunding of its obligations,
>
> provided, and not otherwise that there shall have been secured from the proper Commission an order authorizing such issue, and the amount thereof, and stating that, in the opinion of the Commission, the use of the capital to be secured by the issue of such stock, bonds, notes or other evidence of indebtedness is reasonably required for the said purposes of the corporation."
>
> (L. 1907, Ch. 429, Section 69)

Similar provisions were enacted with respect to the issuance of stock, bonds and other forms of indebtedness by railroad corporations and street railway corporations. (L. 1907, Ch. 429, Sec. 55.)

In December, 1909, in People ex rel. D. & H. Co. *v.* Stevens, 197 N. Y. 1, 9, the Court of Appeals held:

> "We understand that the paramount purpose of the enactment of the Public Service Commissions Law was the protection and enforcement of the rights of the public. Public Service corporations have been granted valuable franchises to enable them to serve the public, and they are deemed to have undertaken to render to the public the service for which they were incorporated upon receiving a proper and reasonable compensation therefor. It is the duty of railroad corporations not only to maintain their equipment, tracks and roadbed in good order, but also to operate their railroads with safety to the public and afford such service as will supply the reasonable demands of the public. For a generation or more the public has been frequently imposed upon by the issues of stocks and bonds of public service corporations for improper purposes, without actual consideration therefor, by company officers seeking to enrich themselves at the expense of innocent and confiding investors. One of the legislative purposes in the enactment of this statute was to correct this evil by enabling the commission to prevent the issue of such stock and bonds, if upon an investigation of the facts it is found that they were not for the purposes of the corporation enumerated by the statute and reasonably required therefor.

The Commission's power is confined to operating utilities. The statute was enacted during what has been referred to as the isolated plant period. As the Court of Appeals stated in the D. & H. case,

for a generation or more the public had been frequently imposed upon by the issue of stocks and bonds by public service corporations for improper purposes, without legal consideration therefor, by company officers seeking to enrich themselves at the expense of "innocent and confiding" investors. At the time of the enactment of the Public Service Commission Law the phrase "watered stock" was frequently seen in the public press. The Commission was not given the power to squeeze the water out of stock theretofore issued and then outstanding in the hands of the public, but as to stocks or other securities thereafter to be issued the Commission was required to find that the proceeds from the sale thereof were reasonably required for proper corporate purposes.
section 69, to wit:

> "The Commission shall have no power to authorize the capitalization of any franchise to be a corporation or to authorize the capitalization of any franchise or the right to own, operate or enjoy any franchises whatever in excess of the amount (exclusive of any tax or annual charge) actually paid to the State or to any political subdivision thereof as the consideration for the grant of such franchise or right."

The purpose of the State to protect "the innocent and confiding investors" was further emphasized by the concluding sentence of section 69, to wit:

> "Nor shall the capital stock of a corporation formed by the merger of consolidation of two or more corporations, exceed the sum of the capital stock of the corporation so consolidated, at the par value thereof, or such sum and any additional sum *actually paid in cash;* nor shall any contract for consolidation or lease be capitalized in the stock of any corporation whatever; nor shall any corporation hereafter issue any bonds against or as a lien upon any contract for consolidation or merger."

The fact that upon the merger or consolidation of two or more corporations the capital stock of the corporation formed by the merger or consolidation should not exceed the sum of the capital stock of the corporations consolidated or merged, at the par value thereof, or such sum and any additional sum actually paid in cash, is undoubtedly one of the chief considerations or reasons for the present era of holding corporations, the issuance of whose stocks and bonds is not required to be passed upon by a Public Service Commission.

At the time of their creation the Public Service Commissions were vested with certain regulatory powers over railroads, street railroads and certain common carriers.

> "The term 'common carrier' when used in this act, includes all railroad corporations, street railroad corporations, express companies, car companies, sleeping car companies, freight companies, freight line companies and all persons and association of persons, whether incorporated or not, operating such agencies for public use in the conveyance of persons or property within this State; gas corporations and electric corporations and certain municipalities, if engaged in the furnishing of gas and electricity to the public so far as pertaining to the furnishing of such service."

The two Public Service Commissions were also to exercise the powers and duties, within their respective jurisdictions, formerly exercised by the Board of Railroad Commissioners and the Commission of Gas and Electricity. The Public Service Commission for the First District was also vested with the powers and duties which had theretofore been exercised by the Rapid Transit Commission. Subsequently, the powers have been extended and certain jurisdiction given over other corporations, including telegraph and telephone lines, motor bus operators, and certain corporations furnishing water to the public. Certain isolated jurisdictions with respect to other matters has been vested in the Commission.

The extension or broadening of the powers of The Interstate Commerce Commission has taken from the Public Service Commission certain of the powers and duties at first vested in it by the act of its creation.

In 1907 there were practically no holding companies in the state of New York and comparatively few of the corporations subject to its jurisdiction were owned or controlled through stock ownership by holding companies.

In 1921 subdivision 7 was added to section 5 of the Public Service Commission Law. It provided:

> "A corporation or person owning or holding a majority of the stock of a common carrier, gas corporation or electrical corporation subject to the jurisdiction of the public service commission shall be subject to the supervision of the Public Service Commission in respect of the relations between such common carrier, gas corporation or electrical corporation and such owners or holders of a majority of the stock thereof in so far as such relations arise from or by reason of such ownership or holding of stock thereof or the receipt or holding of any money or property thereof or from or by reason of any contract between them; and in respect of such relations shall in like manner and to the same extent as such common carrier, gas corporation or electrical corporation be subject to examination of accounts, records and memoranda, and shall furnish such reports and information as the public service commission shall from time to time direct and require, and shall be subject to like penalties for default therein."

A subdivision of similar import, to wit, subdivision 5 was added to section 5-a of the Public Service Commission Law. (L. 1921, Ch. 134).

Constantly the tendency in public utilities has been toward the consolidation or merger or rather the grouping of independent

plants under one management or at least under one control. Having passed from the isolated plant period to the system period of today, is the power now vested in the Public Service Commission sufficient to cope with and solve the problems of today? This question has been and is being discussed in the public press, before legislatures, in Congress and in state regulatory tribunals.

The Federal Trade Commission, pursuant to Senate Resolution No. 83, conducted an investigation, if not to solve the problem, at least to ascertain what has happened and what is taking place.

The nature and functions of holding companies are varied and far-reaching. Public utility holding and management companies are also varied as to the extent of their activities. Some holding companies actually own and operate utility plants. Generally, however, they are organized not to operate but for the following purposes: to control through stock ownership operating companies, to furnish operating companies with specialized legal, engineering, accounting and public relations service, to finance or aid in the financing of operating companies, to lease to operating companies equipment held under patents by the holding company of some of its subsidiaries. They are not simply the parents of the operating companies, dependent for their income on the success of such operating companies, but they are both the parents and the proprietors.

In general there are two methods by which the holding companies may conceivably be brought within the control of State Commission; one direct, the other indirect.

The Commission might be granted authority to regulate them directly as public utilities upon the theory that, since the holding companies themselves control the operation of public utilities, control of the agent requires control of the principal. The other theory is that of indirect regulation and it is claimed that by regulating the operating company the State is given all of the control that is necessary over the company, which, through stock ownership, controls it. The argument against vesting in state commissions the power to directly regulate holding companies has been stated thus:

> "Every interest which the public has in holding companies has been protected by the comprehensive indirect regulation to which they have been subjected. The rates charged the public by the operating company, the valuation of its property for ratemaking or security issues, the items chargeable by it against operating expenses, including fees or compensation paid the holding company—these matters of immediate concern to the consumer are under the watchful eyes of the state commissions. Since the holding company charges no rates to consumers and owns no operating property how could the commissioners possibly protect the public interest by having power over rates which are not charged and property not possessed? Since the commissions already control the property and the securities upon the basis of which holding company securities are issued, what benefit to the public would there be in regulating the securities of the holding company, which could be no better or worse than the operating company's assets—the foundations upon which they rest? The state Commissions' broad powers over the sale by operating companies of their capital stock or physical properties could hardly be made more effective by the addition of a purely formal requirement that both the seller and the buyer submit itself to the commission's jurisdiction, since a denial of authority for the sale to the prospective seller is quite as effective as a similar denial to the prospective buyer, or to both."

In the case of a holding company, whose holdings are confined to operating companies only, naturally the revenue of such a holding company must be derived wholly from the profits derived by the operating companies which it owns and controls. The property of the holding company can be no greater than the combined properties of the operating companies which it owns and controls. The issues of the stocks and securities of the operating companies, if subject to regulation by the Commission, may be issued only if, when and to the extent authorized by the Public Service Commission. The proceeds from the sale of such stocks and securities must be used for proper corporate purposes and actually devoted to such purposes. This does, so far as the stocks, bonds and other securities of the operating companies are concerned, actually accomplish the purpose sought, to use the phrase of our Court of Appeals in the D. & H. case, of protecting "innocent and confiding investors."

But what about the investors who may desire or may be induced to purchase the stocks, bonds or securities of the holding company? Should there be a distinction made between the investors who may desire to invest in the stocks or bonds of the operating companies, and the investors who may desire to invest in the stock or bonds of the holding company which owns and controls the operating companies?

If the holding companies be holding companies organized in this State, there seems no reason why the issuance of stocks, bonds or other securities by them should not, if investors are to be protected, be regulated to the same extent as are the issues of stocks, bonds and securities of operating public utilities subject to the jurisdiction of the Public Service Commission.

If the holding company be organized in some other State, it may be that we have passed that time when State regulation is able to cope with the problem and that the need, in the absence of uniform State laws and cooperation between the several states has arrived for Federal legislation.

Rarely, if ever, have operating public utilities desiring to issue stocks, bonds or other securities petitioned for authorization to issue less than, under the law, they are entitled to issue. The contrary has been true. Authorizations sought have greatly exceeded actual additions made to fixed capital. Had the Commission, with-

out investigation, authorized to the full amount all issues of stocks, bonds and other securities which have been sought, the total authorizations would have exceeded the issues actually authorized by a great amount.

For several years past there has been a persistent effort to vest control of public utilities, operating in this State, in foreign holding corporations. It has been urged that action taken by the Public Service Commission to prevent such action has been detrimental; that it has deprived the present owners of the stock of the operating companies of valuable rights, and that such action will seriously hinder and impede the progress of certain electrical corporations in this State in the financing of betterments and improvements admittedly needed.

The ownership of an operating utility should not, of course, affect the determination of its fair value in a rate case. Fair value must be determined in accordance with established practices and rules of law sanctioned by the courts. Notwithstanding the great number of cases which have since received the attention of our courts, both State and Federal, it is likely that the rule of law laid down in Smyth *vs.* Ames, 169 U. S. 466, still prevails.

A rather clear statement of the rule to be followed in the determination of operating expenses is that of Judge Farrington in Reno Power, Lighting and Water Company *v.* Public Service Commission, 298 Fed. 790, at page 800:

> "To be allowable in a rate case, operating expenses must be reasonable. The utility should be permitted to earn the cost of operation and a fair return; but in addition to a fair return it is not entitled to earn whatever it may choose to expend. Its expense account is limited to the reasonable cost of efficient ordinary operation, to the exclusion of expenditures too large, or otherwise improper, unjust, or unfair to its patrons, who must pay them, if provided for by higher rates."

The acquisition by a holding company of a considerable number of operating utilities results in group management. The economical advantages of group management have been summarized as follows:

> "Consolidation of several operating properties brings about an increased volume of business under one management, which enables it to:
>
> Concentrate productions in large units, increase the utilization of plant, transmission and distribution capacity, and employ the services of the best administrative, financial, operating, construction, technical, purchasing, sales, publicity, and other specialists.
>
> The work of these specialists brings two results — continually improved operating efficiency and increased volume of business, which react upon each other to bring about improvements in service and decreases in its cost per unit.

> It is directly manifested in the development and standardization of the best methods of construction, operating, purchasing, rate making, valuation, accounting, sales, publicity, and other work.
>
> Each consolidation increases the possibility for interconnection with other systems or groups, thus preventing duplication of facilities and realizing in full the advantage of quantity production, which is, in general, a better product at lower cost.
>
> Due to the consolidation of properties, increase in earnings, economies in operation and diversification of risks, the financial standing of the group is so increased that capital for refunding, extensions and improvements can be obtained at much lower cost for the group than would be possible for any individual property standing alone.
>
> To obtain the lowest prices, best quality and most suitable deliveries on materials, requires not only that purchases should be large, but that the purchaser should have an intimate knowledge of the quality of the things purchased, the condition and trend of production, the state of both the supply and the demand, are other marked conditions. He must also be acquainted with transportation conditions and with how and when the things purchased can best be used. On group purchases, the concession in prices below those which the individual plants would have to pay if they stood alone amounts to from twenty cents to forty cents on each ton of coal and to fully 10% on all other materials and supplies. Besides this there are advantages of quality, delivery and terms in favor of the group that are of great importance and value."

That group management honestly and efficiently administered has its advantages is not open to question. There are certain disadvantages, however. Group management results from the fact that the holding company controls several operating companies. It may also control a subsidiary corporation which employs administrative, financial, operating, construction, technical, purchasing, sales, publicity and other specialists and furnishes the service of these specialists to the several operating utilities. In a rate case it is the duty of the regulatory body to scrutinize the wages and salaries paid by the operating company to those in its employ. Where specialists are employed directly by the operating utility, little difficulty is experienced. Clearly, there should be included in the operating expenses the actual cost to the utility of these services if the payments made are within reason and generally they are. Where such services are furnished to the operating utility by the holding company, or some subsidiary of the holding company, payments therefor are generally found to be made on a percentage basis, that is, a certain percentage of the gross revenue of the operating company. This percentage may result in an amount which is the fair and reasonable cost of the

services furnished, or it may have no relationship whatever to the actual cost of such services. A change in the price of the service furnished by the operating utility to its consumers naturally results in a change in the amount paid by the operating utility for the service it receives from these specialists without any change whatever in the value of the service to the operating company or in the cost to the holding company directly or indirectly for furnishing such specialized service. Clearly the regulatory tribunal charged with the duty of ascertaining whether such charges are reasonable, ought to be clothed with power to ascertain what it costs the holding company, or its subsidiary to furnish this expert and specialized service to the operating company.

Where a holding company directly, or through a subsidiary organized for the purpose, furnishes the operating companies with materials and supplies, the same principles are applicable. The operating utilities do not purchase their materials and supplies in the open market on a competitive basis but may be required to purchase them from the parent holding company or from another subsidiary of the holding company. Clearly the regulatory tribunal in the exercise of its duty to ascertain whether the prices paid for materials and supplies are reasonable, ought to have some means of ascertaining the cost of such materials and supplies to the holding company or to the holding company's subsidiary which furnishes the materials and supplies to the operating companies.

The provisions of section 69 of the Public Service Commission Law do not require that a gas or electrical corporation must first obtain authorization of the Commission before borrowing money where the payment of the loan is to be made less than twelve months after the date of the loan. No authorization of the Commission for these loans is applied for, yet when they become due the operating company under and pursuant to the provisions of section 69 of the Public Service Commission Law may petition the Commission for its authorization of further issues of stocks or bonds, the proceeds of which are to be used "for the discharge or lawful refunding of its obligations" or the operating companies may refund such obligations by giving further short term notes and taking up the old.

It was shown in the record that loans made by one holding company to its subsidiaries varied from $80,768 to more than $10,000,000. Can it be that it was the intent of the Legislature in enacting section 69 of the Public Service Commission Law that an operating electric corporation of this state might borrow from the holding company which controls it, or from any other source, more than ten millions of dollars without authorization from the Commission? It seems that careful consideration should be given to the question as to whether or not section 69 should be amended.

Whatever be furnished by the holding company, directly or indirectly through some of its subsidiaries, to an operating company is subject to the same criticism. Is there a contract? Is there a meeting of the minds? Is not the one parent interest meeting and dealing with itself? Yet in Northwestern Bell Telephone Company *v.* Spillman, 6 Fed. (2) 633, it was said:

> "The presumption is that this contract was entered into in good faith and in the exercise of a proper discretion by the officers of both corporations. To overcome this presumption it was incumbent on the defendants (state authorities) to show that the contract was not made in the exercise of a proper discretion by the plaintiff's officers."

RECOMMENDATIONS

13. That subdivision 7 of the section 5 of the Public Service Commission Law be amended so as to make its provisions applicable to any corporation, company, association, joint stock association, copartnership, trust or person, owning or holding either a majority of the stock or a majority of the voting stock of any common carrier, corporation, or person subject to the jurisdiction of the public service commission.

14. That no corporation organized for the purpose of holding the capital stock of any operating utility subject to the jurisdiction of the public service commission shall hereafter be permitted to incorporate if it shall use in its corporate name any word descriptive of the business conducted by the operating utility or utilities, the stock of which it is organized to acquire and hold.

15. That no corporation hereafter organized which has or shall have the power to hold the capital stock of any operating utility subject to the jurisdiction of the public service commission shall be permitted to sell its stocks, bonds or other evidences of its indebtedness through or by means of the agency of any operating utility the stock of which it owns or controls, or through or by means of the agency of the employees of any such operating utility.

16. That no corporation, domestic or foreign, shall enter into any contract with any operating utility subject to the jurisdiction of the public service commission for the furnishing to such operating utility of materials and supplies or managerial services such as accounting, legal, engineering, public relations, or otherwise, unless and until such contract shall first have been submitted to and approved by the public service commission, and that no payments made for such materials and supplies or managerial services of any kind or nature whatsoever shall be allowed or included in the operating expenses of any utility subject to the jurisdiction of the public service commission unless and until the cost of furnishing such materials and supplies or managerial services to the company which may furnish them to the operating utility shall have been shown.

17. That no corporation, company, association, joint stock association, copartnership, trust or person shall loan to any operating utility, the majority of whose voting or controlling stock it owns, any money in excess of 5% of the amount of the duly authorized indebtedness of such operating utility for any term whatsoever, unless duly authorized by the public service commission.

5. COURT REVIEW OF COMMISSION DETERMINATIONS

The Commission's determinations frequently find their way into both the Federal and State courts. Since the Public Service Commission Law does not contain any specific provision for a review of the Commission's determinations the most common method of securing such review has been through the medium of the writ or order of certiorari; at least, until the discovery by utilities of the ease with which they could enter the Federal Courts.

The remedy of certiorari dates back to an early date in the history of the common law of England. Its office generally was to correct errors of a judicial character by inferior courts and errors in the determination of special tribunals, commissioners, magistrates and officers exercising judicial powers affecting the property or rights of citizens and who acted in a summary way or in a new way not known to the common law. It brought up the record either for the purpose of examining into the legality of the proceedings or annulling or quashing an order or judgment of such inferior court.

In these certiorari cases the burden is put upon the Commission of preparing the record for printing, and the Appellate Division must either affirm or annul the Commission's order or dismiss the certiorari. The record discloses that during the period 1921–1929 this method of review was resorted to on twenty-four occasions by parties claiming to be aggrieved by determinations of the Commission. Twenty-two of these cases have reached a final determination. In fourteen of them the Commission was affirmed and in the other eight the order of the Commission was annulled. In six of these annulled the matter was remitted to the Commission for further consideration along lines pointed out by the court. In three of these certiorari proceedings the final ruling was made by the Court of Appeals.

Where the orders of the Commission were made under the provisions of the Railroad Law or the various grade crossing elimination acts direct appeal to the Appellate Division is provided for. In such matters the record on appeal is prepared and printed by the appellant in the manner provided for appeals from an order of the Supreme Court. During the aforesaid period eleven appeals were taken from the orders of the Commission in such matters, in six of which cases the Commission's order was affirmed and in five of which the Commission was reversed. In three of the reversals

the matter was remitted for further consideration. Four of these appeals were carried through the Court of Appeals, the court of last resort in this state.

The remedy of prohibition has been resorted to in matters pending before the Commission on five occasions. In two of these cases the motion for prohibition was denied and in the other three instances the Commission was restrained from further proceeding with the matter under consideration.

Mandamus has been the remedy sought on two occasions, the Commission succeeding in one instance and failing in the other.

In addition to the foregoing the Commission has also appeared before the appellate courts of this state in several cases in which the record was stipulated for the purpose of determining the questions of law involved and has also made numerous appearances before the special term in matters affecting its jurisdiction or under its consideration.

RECOMMENDATION

No recommendation is made for statutory amendment as to this subject.

6. RIGHTS OF MUNICIPALITIES UNDER PUBLIC SERVICE COMMISSION LAW

The question of participation of municipalities in matters before the Commission has been much discussed. Under the Public Service Commission Law complaints against the service or rates of common carriers may be made by any person or corporation aggrieved, and similar provision exists as to complaints against rates and service of telegraph and telephone corporations. Specific provision is made for complaints as to the quality and price of gas and electricity and the service and price of steam heat. The mayor of a city, the trustees of a village or the town board of a town may complain against any of these utilities last enumerated. In addition, upon the complaint in writing of not less than twenty-five customers or purchasers of gas or electricity, or upon complaint in writing of not less than fifty customers or purchasers of steam heat in cities of the first and second class, or of not less than twenty-five in cities of the third class, etc., the Commission must investigate by public hearings as to the causes for such complaint.

The misapprehension as to the rights of municipalities to appear in rate proceedings undoubtedly arises from the fact that the courts have held that a municipality is not necessarily a proper party to litigation in a rate case affecting the consumers or subscribers within the municipality. As a matter of practice, however, every city which has sought to intervene in such a court case has been permitted to do so, so far as it has been able to be ascertained.

For example, the city of New York was permitted to intervene in the federal court case instituted by the New York Telephone Company and has been an actual participant throughout the entire matter.

Municipalities have always been permitted to appear before the Public Service Commission and participate to the fullest extent in all proceedings before it.

The record taken here shows that the counsel's office of the Commission is continuously furnishing advice and information to municipalities of the state, that as many as six hundred letters on an annual average, are written to corporation counsel and public officials of various cities and, at the present time, the counsel for the Commission is appearing as the representative of practically all the municipalities of the state except the city of New York and the city of Buffalo, in the New York Telephone Company rate proceeding.

The fact is that the difficulties encountered by municipalities in rate cases arise because most corporation counsel as well as most practicing attorneys have not specialized in public utility matters and generally feel that they are not sufficiently familiar to cope with the counsel of public utilities. Moreover, few municipalities can maintain utility bureaus in their law departments or feel able to hire experts in order to adequately prepare and present their contentions. The record indicates that there is an additional legal question as to the right of municipalities to provide funds for rate case expenses in certain circumstances.

The real question involved here is as to the right of those representing municipalities to examine the books and records and operating plants of a utility. The courts have uniformly held that while the Public Service Commission may make the fullest examination, that the utilities may properly object to having their books and accounts scrutinized and examined for long periods of time by representatives of municipalities, the courts taking the view apparently, that since the Commission has the right, the utilities should not be subjected to a multiplicity of examinations of their books and records. But in practice before the Public Service Commission this record shows that the difficulty is more imaginary than real, for in every case where municipalities and other parties to rate proceedings have been refused examination of the books and records of utilities, the Commission has directed that such books and records be made available at the Commission's office for examination by those representing the municipalities. As a result there has been no rate proceeding in which the engineers and accountants representing municipalities have not in fact been allowed to examine books either at the offices of the companies or through the direction of the Commission. In some instances, as in the case of the New York Telephone Company litigation, not only has full access been given to representatives of the city of New York but special space

in the Company's plant has been assigned to the representatives of the city for their use during such examination of books and records, and for all practical purposes, during the entire continuance of the litigation.

RECOMMENDATION

No recommendation is made for amendment of the law in this respect since it appears unnecessary. If the legislature by amendment of the law desires to make municipalities parties in every rate proceeding, such action might be taken, but it is recommended that the views of the municipalities as to the feasibility of such action first be had. The establishment by the Public Service Commission of the practice of making its research bureau (recommended herein) and the service of its counsel available to those municipalities which desire such service, would seem to effectually cover any lack of full and proper participation in rate proceedings which may have been encountered under the present statute and practice.

7. CAPITALIZATION AND SECURITY ISSUES

One of the primary purposes of the Public Service Commission Law and one that was stressed by Governor Hughes in urging its enactment was the regulation of security issues by public utilities corporations and the prevention of the reckless floating of stocks and bonds without regard to the value of the property upon which such issue was based. No better demonstration that this evil has been cured could be given than the present high place held by regulated utilities in the money market and the regard such issues are held by conservative investors.

Certain criticisms have been made of the control exercised by the Commission over security issues and its supervision of the expenditures of money received from such sales. As previously pointed out, the present number of Commission employees can only do a definite amount of work and any further extension or regulation can only be had if additional employees are authorized.

RECOMMENDATION

18. It is suggested that certain minor amendments be made to the Commission Law to clarify ambiguous sections and to unify provisions pertaining to different classes of utilities as made by the Public Service Commission and as they are included in Counsel's report to this Commission. These suggestions are of an administrative nature and should be adopted.

8. REGULATION OF MOTOR BUS OPERATORS

Representatives of motor bus interests and of the Public Service Commission who appeared before this Commission believed that motor bus regulation should be definitely embodied in one article

of the Public Service Commission Law in substantially the form provided for by the so-called Thayer bill, vetoed in 1929 by Governor Roosevelt.

The provisions of this bill known as Senate bill 508 were discussed at length by Chairman Prendergast. The bill was received in evidence together with its companion bill number 507. The witnesses who testified concerning motor bus regulation were familiar with this Act and in each instance endorsed it.

Chairman Prendergast and Commissioner Van Namee stated that the jurisdiction of the Commission over motor bus regulation was not specifically set forth in the present law. Commissioner Van Namee testified that the Public Service Commission in its annual reports has constantly recommended the enlargement of the law relating to regulation of motor vehicles, now covered by a few provisions of the Transportation Corporations Law and general provisions of the Public Service Commission and Railroad Laws. Mr. Van Namee stated that the Commission has stood sponsor for the Thayer bill which he believed to be fair and intelligible. In his opinion the Commission has felt that it should regulate the rapidly increasing branch of public service and that at times the Commission has undoubtedly exceeded its authority in attempting to regulate motor vehicles.

A. Raymond Cornwall, General Counsel of the Colonial Motor Coach Corporation, (the largest operator in this State) testified to the need of legislation defining the jurisdiction of the Public Service Commission over motor bus carriers.

William D. Cameron, an attorney representing Bus Associates, Inc., testified at length on the present motor bus situation. He expressed the view shared by other bus operators that municipal authority over bus routes could be entirely eliminated but for the fact that such a step might be said to conflict with home rule provisions. He felt that the Thayer bill did not go far enough in limiting the powers of local municipalities and that the Public Service Commission should have the sole authority over the contents of consents, leaving the municipality only the right to determine the streets to be traversed together with control over parking and terminal regulations.

Other witnesses testified to the necessity of an article in the Public Service Commission Law covering complete regulation of motor bus operation, thereby bringing this growing industry under Public Service Commission jurisdiction in the same manner as other utilities. To anyone familiar with the present legislation with respect to motor bus operation there is no need of argument as to the necessity of such a law; the fact that the Commission has worked out its own policy is the only reason it has some measure of control over this constantly developing utility.

Muncipal consents are provided for by section 66 of the Transportation Corporations Law. This section does not specify the provisions which may be contained in the consents. For that reason the municipal authorities insert conditions over which they

have no means of control. Some of these consents contain more than twenty pages of conditions, few of which they would ever be able to enforce, thereby diminishing the possibility of requiring compliance with valid provisions.

RECOMMENDATIONS

19. Senate Bills 507 and 508 (Legislative Session of 1929) should be enacted as drawn.

20. Section 66 Transportation Corporations Law should be amended so as to definitely state all the terms and conditions which may be contained in a municipal consent for the operation of a motor bus line. The statute should specifically state that the municipality granting a consent may insert conditions that are effective only within the limits of the municipality granting said consent. The terms and conditions set forth in the section should be so expressed that a consent may be readily drawn in compliance with the provisions of the section.

9. GRADE CROSSING ELIMINATION

Since 1897 the Public Service Commission has been the agency of the State charged with duty of supervising the elimination of railroad grade crossings. Prior to 1926 this power was conferred by sections of the Railroad Law. At the general election held in November, 1925, the constitution of the State was amended by adding Section 14 to Article VII. This section authorized the Legislature to create a debt not exceeding the sum of $300,000,000 to be used for the elimination of grade crossings. At the election held in November, 1927, this section was amended to provide a different division of expense between the state and the municipality. Upon the adoption of this amendment to the constitution the Legislature in the 1926 session adopted three acts providing a plan for the elimination of grade crossings throughout the State. Chapter 233 of the Laws of that year pertained to all grade crossings outside the cities of New York, Buffalo and Syracuse. Chapter 510 applied to New York, Chapter 844 to Buffalo and Chapter 439 to Syracuse. In the session of 1927 certain amendments to these acts were made.

In 1928 to carry out the amendment made to the constitution in the previous fall the grade crossing elimination act was entirely rewritten (Chapter 678). Separate acts were again adopted for the state outside the cities New York, Buffalo and Syracuse and for these cities the acts are contained in Chapters 667, 679 and 825, of the laws of 1928.

In the session of 1929 amendments were made to certain sections of the Law but the act generally was not changed. Under the provisions of these acts practically all eliminations are now being accomplished, although Sections 89-96 inclusive, of the Railroad Law are still applicable in certain cases.

Supervision of grade crossing eliminations is under the act divided between four State agencies:

(1) The Public Service Commission.
(2) The Department of Public Works.
(3) The Comptroller.
(4) Attorney General.

Each of these departments has separate and distinct duties to perform. Generally the Public Service Commission determines which crossings shall be eliminated, the general method of accomplishing the elimination and approves the completed work. The Department of Public Works has supervision of the actual construction. The comptroller has charge of all financial accountings and the payment and collection of all moneys. The Attorney General passes on the titles of real property necessary for the elimination.

The plan provided by the present act is briefly as follows: In the Fall of each year the Department of Public Works, the Railroad companies and the municipalities submit to the Public Service Commission lists of grade crossings that they believe should be eliminated. Hearings on these lists are held by the Commission and an order is made in December of each year setting forth the crossings that will be considered for elimination during the following calendar year, together with the estimated cost of each elimination. Copies of this order are submitted to the governor and the financial committees of the Legislature to enable them to know what sums it will be necessary to appropriate for this work. Such an order is also desirable to make a division of crossings between the different railroad corporations operated in the State and to provide an orderly program for the elimination of the more dangerous crossings.

Beginning in January of each year the Public Service Commission holds hearings respecting each of the crossings listed on the program order. At these hearings the question is taken up as to whether the public welfare requires the elimination of the particular crossing and if it is determined that an elimination should be made the method of accomplishing such results is considered. Studies and plans providing for different methods are customarily submitted by the Department of Public Works, the railroad involved, and, at times, by the municipality.

These plans and studies are considered and criticized at the hearings and from the information so obtained the Commission is able to make an order directing the method best fitted to deal with the peculiar circumstances surrounding the crossing. After the making of this elimination order the Commission directs the Department of Public Works or the railroad company to prepare plans and estimates and approves such plans. The Commission then directs the railroad company or Department of Public Works to construct the elimination in accordance with the approved plans.

All bids for work must be submitted to the Commission and if found excessive, are rejected. The Department of Public Works has direct charge of the work. It checks the quantities and sees that the work is done in accordance with the plans and specifications.

Upon the completion of the work the Department of Public Works notifies the Public Service Commission who examine and approve the completed work. After the approval of the work by the Public Service Commission the Comptroller computes the share of the cost chargeable to the State, the railroad corporation and the county, and if the share of the railroad company has been advanced by the State the Comptroller determines the time and amounts of repayments.

The act of 1928 provided a new method for the acquisition of land necessary for an elimination. The method provided is that of appropriation and is generally similar to that used when land is taken by the State for park or canal purposes. It may be briefly described as follows:

Land maps setting forth each plot of land necessary for an elimination project are prepared by the Department of Public Works or the railroad corporations and submitted to the Public Service Commission for approval. They are then filed with the Department of State. The Attorney General makes a search for the title of such land to determine the true owner. Copies of land maps are served on such owner and upon such service the State can at once take possession of the land. The Department of Public Works is authorized to make settlement with the land owner to compensate him for the property taken and if such agreement cannot be had the owner is authorized to bring proceeding in the Court of Claims.

The grade crossing elimination act provided a radically new method of eliminating grade crossings and time has been required to put this new method in operation. The work has been somewhat retarded by the many amendments that have been made in the law since 1926. However, since the new act of 1928, work is well under way. The number of crossings considered and eliminated has been set forth in a preceding section of this report and will not be again repeated. The plan of the act was well conceived and the duties and supervision of the eliminations are properly divided between the different State departments.

Suggestions have been made that certain of the powers now exercised by the Public Service Commission should be transferred to the Department of Public Works. These suggestions do not appear to have merit. The determination of what crossings should be eliminated and the consideration of the different methods of accomplishing the elimination are quasi judicial functions that are best exercised by a body such as the Public Service Commission. In numerous cases sharp difference of opinion develops as to how best to separate the grade of the highway and railroad. The railroad corporations generally advocate the

cheapest possible method, the Department of Public Works is primarily interested in highway development, and the municipalities in which the crossings are located have definite desires in the matter. All of these divergent opinions are presented at the hearings and must be determined by the same tribunal.

As has been previously stated, separate acts have been adopted applying to the cities of New York, Buffalo and Syracuse. Each of these municipalities has different problems. For example, the city of Syracuse is now crossed at grade by the main tracks of the New York Central Railroad Company. How best to do away with this dangerous condition has been a contested question in that city for many years, and now for the first time a definite solution has been reached.

RECOMMENDATION

21. Certain minor changes and amendments to the law were suggested in the record by the Public Service Commission. These suggestions are primarily for the purpose of clarifying sections of the law and not to make general changes in the act. This is as far as seems proper to go at the present time. Any general change in the law would only have the effect of again retarding the elimination of dangerous crossings.

10. MISCELLANEOUS MATTERS

(a) Sub-Metering and Conjunctive Service

An extensive practice and in some instances a substantial business has grown up in the Borough of Manhattan and other boroughs of New York City as well as in certain upstate cities, where the installation and maintenance of electric or gas meters is left to a meter corporation. The owner of the building purchases the energy from a utility and sells it to his tenants through submeters, employing submetering companies as his agents in transacting this business. The meter corporation installs the meters, keeps them in condition, bills the tenants, and collects the revenue, receiving for this service a share of the difference between what the owner pays for the electricity furnished by the electrical corporation and the meter corporation receives for the electricity distributed.

The Brooklyn Edison Company placed in its schedule a provision that it will not render service for submetering to residential premises. Complaints alleging refusal of service on this ground are now being heard before the Public Service Commission.

The practice of submetering in the Metropolitan territory has grown steadily so that at the present time there are more than 10,000 master meters serving premises wherein the electrical energy is retailed by owners or lessees. The yearly consumption on these meters is in excess of 550,000 kw. h. and the estimated number of customers approximates 200,000.

Left entirely to their own devices, it is not surprising that some of these corporations, often poorly informed as to the electrical engineering phases of meter installation and maintenance, should have difficulties with their customers. Standard systems of bookkeeping as well as meter reading and testing by experienced persons are essential to the avoidance of errors and the resultant complaints.

Electrical corporations under the jurisdiction of the Commission, with well organized departments have comparatively few serious complaints considering the large number of customers served; on the other hand complaints are numerous with respect to the submetering and maintenance corporations, whose bookkeeping systems are of their own making and whose meters and installations are beyond public surveillance and generally beyond that of the customers. It is fair to say, however, that there are some meter corporations which endeavor to install their meters properly, to make accurate readings and billings and to maintain good relations with those whom they serve.

The subject of regulation of submeters is one upon which there is no statutory authorization conferring upon the Public Service Commission adequate supervisory powers to insure proper protection to users of electricity who obtain their supply of electric energy through submeters. The Public Service Commisson, in its annual reports for several years past, has referred to this matter and to the desirability of legislation upon the subject.

It is evident from the record taken by this Commission that the practice of submetering involves the substitution of the third party between a utility and the ultimate consumer; that such third party is not subject to regulation although as a matter of fact he is ordinarily conducting the business of a public utility, or at least making a profit from business which has a direct relation to a public utility.

RECOMMENDATIONS

22. Any recommendation made relative to statutory amendment regarding the practice of submetering or conjunctive service must necessarily take into account that in the borough of Manhattan the practice has been encouraged or at least permitted by the utility companies operating in that borough; that extensive property investments have been made by certain submetering corporations and property owners engaged in similar business. A suitable time should be afforded for the salvaging of such investment before any amendatory statute is permitted to become effective in that borough.

23. An amendment to the present law should, however, be made which will give to the Public Service Commission such jurisdiction over submetering practices as will insure the protection of the user of the commodity as to reasonable rates and adeqaute service.

(b) Private Water Companies

No jurisdiction over the 376 municipal and 232 private water companies now operating in the state, is now had by the Public Service Commission.

The general opinion of witnesses was that water companies should be regulated the same as any other utility. At the present time the Commission has some slight jurisdiction when an agreement is made between two localities (water districts) under the Town Law. Should the Commission be given jurisdiction over water companies it might be well to consider if the powers now vested in the Water Power and Control Commission should be also exercised by the Public Service Commission.

Many complaints have been made against these private water companies for poor service and excessive rates.

RECOMMENDATION

24. It is recommended that private water companies be placed under the jurisdiction of the Public Service Commission.

(c) Telephone Companies

At present telephone companies having a property value of less than ten thousand dollars are not subject to the jurisdiction of the Public Service Commission. The limitation upon the authority of the Commission appears in section 2, subdivision 17 of the Act by virtue of which any "corporation" having property actually used in the public service within the State of a value not exceeding ten thousand dollars has been excepted from the purview of the statute.

It has been suggested that these companies (there are about 300), be brought within the jurisdiction of the Commission and thus authorize the Commission to investigate service complaints and the reasonableness of rates. Under the present law the Commission's jurisdiction is practically limited to an examination of working agreements between these companies and other telephone companies under the Commission's jurisdiction.

RECOMMENDATION

25. The statute should be amended so as to extend the Commission's jurisdiction to cover rates and service of all telephone corporations.

(d) Rural Rates

During the last ten years electric service has been, for the first time, generally extended into rural sections of this state. These extensions and the desires of localities not now supplied to be provided with service has brought forward the question of the relative rates that this class of users should pay as compared with city consumers. Two views have been urged. One, that each class of users should pay its own way and the other that similar rates should be charged to all consumers, whether living in a thickly settled city or on a remote farm.

The advocates of the first view point out that any loss growing out of the rendering of service to a favored class must be reflected in increased rates to all other consumers. That the fixed cost in supplying electricity through sparsely settled territory where but two or three consumers taking service from each mile of line is very different than in sections where practically every resident of a block is a customer. The advocate of equal rates contend that all users should be charged equally, the total cost of rendering the service being divided among them.

(e) Rural Electrification

Electricity for domestic use was first supplied to the city dwellers, but by degrees distributing lines were extended into the suburbs and eventually further into the country section. In many cases farmers anxious to secure service constructed at their own expense, pole lines and turned them over without cost to the utility. Rates for this rural service were made on no standard basis, each company making such rates as it saw fit. In the last few years, however, with the rapid spread of distributing lines through all parts of the state some more uniform method of making rates appeared desirable. The Public Service Commission took a leading part in devising such a plan, and what is known as the "Adirondack Plan" was adopted and is now effective through the vast majority of the rural territory in this state. Under this plan a minimum charge to each consumer is made, dependent upon the length of line required and the number of consumers served. This minimum charge is intended to compensate the company for the necessary extension and not to supply any element to profit. The commodity rate is not increased, but is similar to that charged in adjoining territory. This form of rate encourages the use of current and has proved generally satisfactory.

The average cost of constructing rural distributing lines is about $1,800 per mile and the Public Service Commission in granting authority to electric companies to make rural extensions requires that standard equipment be used and will not approve construction which does not meet such requirements. Any radical change in the rate structure of electric companies that would provide equal rates to all consumers, no matter where located, would in many cases result in substantial increases to village and city consumers. Such a result is not desirable. There are without doubt certain cases where modifications is rural rates should be made.

RECOMMENDATIONS

No recommendations are deemed necessary with regard to this subject.

(f) Commerce Court

The only evidence in the record relative to the establishment of a Commerce Court was the opinion of witnesses that it was difficult to see at the present time and under the present system of

regulation what a Commerce Court could do. If its function was to pass upon questions of a business character it could only function as to certain matters which come before the Commission. If it was to be a court of appellate jurisdiction it would only be another intervening court between the Commission and the present appellate courts of the state. The record shows that appeals from determinations of the Public Service Commission and applications to review such determinations are preferred matters in the Appellate Division, and that there never has been any delay in the decision of such matters before the appellate divisions of the Supreme Court. Final appeal from such decisions under the law and rules is, in the proper cases, to the Court of Appeals of the State of New York. Under the present condition of the calendar of the Court of Appeals there has been and can be no improper delay in such matters.

RECOMMENDATION

No recommendation is made for the establishment of a Commerce Court.

(g) Separation of Commission Into Judicial and Administrative Divisions

To change the character of the Public Service Commission and to divide it into one group of commissioners to pass upon facts and another group to pass upon questions of law applicable to such facts has little support in the evidence disclosed in the record here. It appeared that practically all matters brought before the Commission involved the decision of mixed law and facts. To subdivide these questions, which are interrelated, would in the opinion of the witnesses who testified result in an increase of personnel and expense without in any way changing the character of the determination finally arrived at.

RECOMMENDATION

No change is recommended looking toward further division of the duties or personnel of the Public Service Commission.

(h) Uniform Rates—Service Charge

Various forms of rate schedules are in force in this state. Many companies have adopted complicated tariffs which are confusing to the average consumer. In December, 1928, a proceeding was initiated by the Public Service Commission to investigate rate forms and to determine the practicability of a uniform form of schedule, suitable for all gas and electric companies. This proceeding has not yet been concluded.

Electric rates in New York State are comparable to rates in other states. In Massachusetts the Commission has not been much concerned with power rates; however, these rates are competitive in their nature, due to the fact that a maufacturer can develop his own power. One witness testified that he believed the matter

of a commercial rate to small manufacturers needs attention so that small power users will be able to obtain reasonable rates where he cannot protect himself, and that power losses by the companies were causing domestic consumers a higher rate to make up these losses.

Discussion of various rates was had and witnesses favored the room rate, which, although not as scientific as the so-called area rate, seems to save expense and is more readily understandable. These two rates are similar.

The State of Massachusetts permits a service charge not in excess of 50 cents. Boston has a commercial rate of 8½ cents with free lamps reducing the price of electricity to 8 cents.

The residential area rate is on the area basis which charges in the first block are 8½ cents, but most residences in the Edison area use any considerable amount of electricity by getting it between 6 and 7 cents or even lower than that. Worcester has a maximum rate of 5 cents, which is as fair as there is anywhere in the country. In Cambridge and Springfield, the maximum rate is 5½ cents with an optional rate; either an area rate or a room rate will reduce the rate lower than 5½ cents. In Holyoke where the population is between 60,000 and 70,000 people, they have a muncipal plant competing with the Holyoke Power Company for power service; the maximum rate is 4 cents. In the town of Hudson, a small community, electricity is sold for 7 cents for the first 20 kw. hrs., 3 cents for the next 18 kw. hrs., and 2 cents for all over. The Town of Reading buys its electricity wholesale and it distributes it at a maximum rate of about 7½ cents for the first 25 kw. hrs., 2.7 cents for the next 150 kw. hrs., and 1.8 cents for the balance.

There are 43 or 44 municipal plants in Massachusetts, the largest being in Holyoke. The municipal plants are required by law to be self-sustaining. They must set aside or retire 5% of the investment annually and set aside 3% for depreciation annually. If they receive a return on the investment of more than 8%, they must reduce rates.

RECOMMENDATIONS

No recommendation as to this subject is made.

(i) People's Counsel

The principal testimony relative to the office of People's Counsel (based on any experience) was furnished by a lawyer from the State of Maryland who until recently was People's Counsel in that State. Originally, the task of appearing before the Public Service Commission in the public interest was assigned to the Assistant to the General Counsel.

In 1912 complaints against the Consoliated Gas, Electric Light and Power Company of Balitmore were referred to the then Assistant Counsel (now Governor Albert C. Ritchie). Governor Ritchie tried the case before the Commission and secured a reduc-

tion in the rates. He became popularly known, without official designation, as People's Counsel.

In 1924 the office of General Counsel to the Maryland Commission was abolished and the duty of appearing in behalf of the public in rate and other cases was delegated to an officer known as People's Counsel. The office thus created had the same duties as had been those of the Assistant to the General Counsel to the Commission, except that after the office was created, appearance was not limited to cases in which the Commission had directed him to appear; in other words, he was allowed to himself determine those cases in which a public interest was involved and make up his own mind as to his appearance. The salary of the office was low, and it is not regarded as a full-time position. The incumbent is permitted to carry on private practice of law and while maintaining close personal relations with the Commission, the office is regarded as an independent one with the privilege to the incumbent of making his own determination on matters of public interest and on the facts he is to present to the Commission.

In important cases People's Counsel must depend for his assistance upon the staff of the Commission. The witness stated that no difficulty or embarrassment has ever been experienced because of that fact, that People's Counsel never confers with the Commission after a case is tried, is never consulted by the Commission as to any case under trial and is considered in the position of a litigant.

The witness believed it would be disadvantageous to have People's Counsel independent of the Commission rather than within the Commission. It was his opinion that the system as practiced in Maryland had worked well, that rate cases are tried in a shorter time, the record is more concise, and the real points of dispute are able to be considered and determined. The office of People's Counsel has advanced every man who has held it either professionally or politically. In spite of this, the witness stated that in Maryland no People's Counsel had ever used the office for his own benefit although they had a fairly frequent fluctuation in office and most of the People's Counsel after retirement, had accepted employment from utilities.

The members of the Public Service Commission of the State of New York were generally not in favor of the establishment of the office of People's Counsel. It was felt that embarrassing situations might arise if People's Counsel had the right to take experts and other assistants from the Commission staff. Commissioner Brewster advanced the idea that Counsel or Assistant Counsel to the Commission can in every case be assigned to represent the public, without legislation, and that the practice has been to some extent followed by the Commission.

The representative of the Mayor's Conference Committee testified that he thought it would be better to have a staff of experts

under or a part of the Public Service Commission than to create a separate bureau under the Attorney General.

The witness Thomas believed that the office of People's Counsel should be established and that he should be empowered to initiate rate cases, be appointed by the Governor and have an independent staff not identified with the Commission but should bear the clear responsibility of providing for cities and consumers the training and specialized knowledge essential in competing with representatives of utilities.

The witness Hurley believed there should be a People's Counsel under the Attorney General or under the Commission, but that his work should be limited to valuation proceedings.

RECOMMENDATION

If a research staff be formed under direction of the Public Service Commission and the data and records made by such staff be available at all times to representatives of municipalities and consumers, then

> 26. The statute should be amended to provide that Counsel to the Commission shall, upon written request to the Commission, be assigned to appear as People's Counsel in all cases in which it appears to the satisfaction of the Commission that the public interest requires such special representation.

(j) Public Ownership

The subject of public ownership was developed as a by-product of the examination into the operations of various utilities. It would appear to be largely a political question and the evidence adduced at the hearings was confined to testimony given by Norman Thomas and his associate, Dr. Laidler; F. L. Bird, who made a study of the subject to be published in the New Republic, and Alvin C. Reis, the progressive floor leader of the Wisconsin Legislature and the proponent of the new power district plan for the State.

Statistics are not wanting for what has been assumed to be the successful operation of public utilities under public ownership and attention was drawn to the publicly owned Los Angeles Electric Light Company, the Ontario system operating in the province of that name, the municipal plants in Tacoma, Washington, and Springfield, Illinois.

It has been stated that there are two thousand municipal plants in this country, but it was not shown that any considerable number of these compared in operation or territorial scope with privately owned enterprises. Both Mr. Thomas and his associate, Dr. Laidler, reiterated the position which each has taken in the public forum, that the interest of the consumer is found in publicly owned and operated plants. Mr. Thomas outdistanced his associates and declared for a federal monopoly for the telephone

service rather than a monopoly by a particular state (3732). However, one of the experts, Alfred E. Forstall, called before the committee, who had represented both public and private interests for a number of years, testified that as a general proposition a privately owned plant serves the community better than a publicly owned one (3919–20). Both Mr. Reis and Mr. Forstall, however, emphatically declared that the municipally owned plants should be operated under the jurisdiction of the regulatory body of the State.

The argument often presented in opposition to public ownership of utilities, has been that it would embarrass the proper functioning of a public enterprise by introducing into its operation the element of political preferment. In answer to this Bird testified that small political expediency seems to have influenced the selection of employees in publicily operated plants (3332). This suggestion seems to run counter to what has been publicly acknowledged to be the fact.

In the last analysis, whether a state shall operate the utilities supplying its citizens with those essentials now served them by public utilities privately owned, is a question to be decided by the will of the people.

RECOMMENDATION

27. Any change in the law covering the subject matter briefly described hereinabove would seem to be out of place in any proposed report submitted by a committee to investigate the operation of the public service commission law.

(k) Transmission of Power—Interstate

The subject of transmission of power across boundary lines from one state to another is of growing importance. In the conduct of business under existing conditions this is a development which cannot and should not be retarded. Federal legislation may be necessary in the interests of proper regulation but such legislation should be most carefully drawn so as not to take from the states their inherent rights of complete regulation within their respective jurisdictions. The State of New York, through its Governor and Attorney General, should take active steps to see that its rights are fully protected in this regard. Compacts between the states are desirable.

28. Recommendation. No recommendation is made further than above stated.

RECOMMENDATIONS OF COMMISSIONERS

FRANK P. WALSH
JAMES C. BONBRIGHT
DAVID C. ADIE

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TO THE LEGISLATURE OF THE STATE OF NEW YORK:

Under the mandate of Chapter 673 of the Laws of New York, which is declared to be:

> "An act to create a temporary Commission to make a thorough survey, examination and study of Public Service Commission Laws in relation to the operation and the effect thereof, and to propose remediable or other legislation in relation thereto."

we beg leave to submit the following report:

INTRODUCTION

OUTLINE OF REPORT ON PUBLIC UTILITY REGULATION IN NEW YORK STATE

Evidence presented before the Commission on Revision of the Public Service Commissions Law shows that the State of New York is faced with a crisis. Effective regulation along the lines originally intended by the act has broken down and the consumer has been left to the exploitation of the monopolistic private companies which control the public services. Unless effective regulation can be restored, there is bound to be a rapid shift of public opinion in favor of public ownership and operation.

The evidence shows further that the public utility companies have been chiefly responsible for the break down of regulation. While the appearance of regulation has been kept up in order to placate public opinion, the utility companies have mobilized large accounting, engineering and legal staffs to circumvent and undermine the regulatory machinery in order to secure large profits at the expense of consumers throughout the State.

In the face of such evidence we will not stultify ourselves by proposing mere palliative measures. We are convinced that only by establishing a definite and workable standard of rate making, enforceable by an active Public Service Commission, urged on by an enlightened public opinion, and with the probability of public competition in the background if the companies continue their present tactics, can regulated private monopoly in the rendering of the public services continue.

Our conclusions as to the purpose of the Public Service Commissions Law, the present failure to fulfill that purpose, and our recommendations for making the law effective, may be summarized as follows:

PART I

THE PROBLEM OF STATE REGULATION

1. *The Public Service Commissions Law of this State was designated primarily as a means of protecting the interest of the public in good service and reasonable rates.* Its object was clearly and frankly to relieve the public of the wastes of competition among the utilities while safeguarding it against exploitation by private monopoly. To this end a Public Service Commission was created with authority over rates and services. It was supposed to exercise full initiative in preventing utility companies from using their monopoly power to charge rates higher than necessary to pay reasonable operating costs and to provide the stable return required to secure the necessary capital.

2. *The evidence before us is conclusive that these objects of public service regulation have not been attained.* The Public Service Commission has taken very little initiative in enforcing rate reductions commensurate with the decreasing costs of supplying public service. With rare exceptions, rate-fixing orders have been made only on complaint by municipalities, consumers and companies. The burden of proving the unfairness of the existing rates has been placed very largely upon the complainant, the Commission being unwilling or unable to assume this burden. In consequence the Commission has become increasingly a purely judicial body rather than an active administrative body as intended by the Public Service Commissions Law.

3. *The Commission's acceptance of the judicial rather than the administrative point of view* has meant an attitude of waiting for complaints to arise instead of attempting to regulate rates in such a way as to avoid the occasion for complaint. In our opinion, this attitude is inconsistent with the purpose of the Legislature in providing for public service control by a Commission.

4. *The prime responsibility for the ineffectiveness of public service regulation,* in our opinion, must rest squarely with the prevailing legal system of rate making on the basis of a valuation of property, subject to review both as to law and as to facts by the Federal Courts. Under the influence of this theory, the Public Service Commission of New York State has gone far toward abrogating its control over public utility rates.

5. *The Public Service Commission, as the evidence shows, has felt willing or obliged to sanction rates which cannot possibly be justified on any economically sound basis of control.* It has tended to dodge every vital issue of a controversial character because of its fear of Court reversal, and has in effect surrendered to the utility companies the right to charge whatever rates the conditions of their business and the monopoly character of their enterprise will support.

6. *The unlimited power of the utilities to resort to the Courts in rate cases means the failure of regulation.* There ceases to be any final authority with power to fix rates so that appeals to the Courts have the effect of freeing utilities from regulation. The New York Telephone Rate case shows regulation reduced to a farce through successive appeals to the Federal Courts on a fictitious reproduction cost valuation claim. The company's own experts could not agree on such a valuation within a range of $100,000,000.

7. *The reproduction cost theory is the latest device of the companies for undermining regulation* along the old over-capitalization lines. Like stock watering it tends to conceal from the public the high rate of profits and enables the companies to charge as high rates as their business judgment dictates. Valuation cases mean an unequal battle for the public and causes commissioners to fear to initiate rates cases.

8. *Over-valuation is the modern form of over-capitalization.* It proves a simple matter for the companies, with millions of dollars of consumers' money to spend, to convince the Courts that their valuations are justified. Such valuations include accumulations of obsolete and inefficient plant valued at cost new, reserves which should have been used for the retirement of such comparatively useless property, good will or franchises capitalized under some new designation and many other fanciful additions discovered by engineering and accounting staffs.

9. *Consolidated Gas Company with its affiliated electric companies is an outstanding example of such over-valuation* in New York State. Its capacity to serve the public is probably overvalued to the extent of about $150,000,000. Even the Courts, which recognize its valuation as legal, admit that such items as $7,781,000 for franchises never represented a single penny of investment. Upstate mergers are starting the production of a similar excessive valuation, including the capitalization of their rights to the falling water of streams. Such over-valuation, like its prototype over-capitalization, renders regulation meaningless.

10. *The electric rate situation throughout New York State affords concrete evidence of the extent to which this condition has meant the practical abandonment of the consumer in the charges of the corporations.* The rate levels in different sections of the State show a complete lack of uniformity which can be explained only in part by legitimate differences in production costs. The average for domestic consumers throughout the State is considerably above the average for the rest of the country.

11. *New York City consumers have been especially the victims of lack of regulation in the matter of electric rates.* Manhattan homes could get their electricity for a maximum of 5¢ a kilowatt hour if they were charged in accordance with the cost of serving them. Instead they have paid a 7¢ rate for 13 years without reduction and the Public Service Commission has initiated no move to secure them lower charges. Meanwhile the New York

Edison Company has spent more than $5,000,000 in a 7-year fight against a movement for lower rates initiated by the City of New York. The president of the company admits that they may go to the Courts on the valuation question if the Commission decides unfavorably.

12. *The coal surcharge fraud was another instance in which regulation proved utterly ineffective* in protecting the consumer of electricity in New York City. From 1921 to 1928 the Consolidated Gas Electric subsidiaries collected through the coal surcharge $20,000,000 more than the increased cost of coal warranted. Then, when consumer petitions finally forced the Commission to take cognizance of this unjustifiable levy and the companies were advised to take it off, they deceived the public into believing that the resulting reduction of $4,500,000 in their electric bills represented the public's share of savings due to the acquisition of Brooklyn Edison Company by Consolidated Gas Company. The misleading advertisement which broadcast this deception cost the public over $25,000.

13. *Gas consumers in the City of New York* have also been practically unprotected so far as regulation is concerned. The Public Service Commission allowed the companies to reduce the standard quality of gas at the same time that gas rates were raised. Representatives of consumers seeking to testify in regard to the quality of gas were excluded and the reduced standard was accepted on hand picked evidence favorable to the companies. The interests of gas consumers have also been disregarded in connection with the introduction of the two part rate.

14. *Practical disregard of the consumer interest under the present system of regulations,* and the subserviency of the Public Service Commission to the corporations, was revealed in a considerable amount of evidence. In the Long Island Lighting case the Commission was twice petitioned to investigate excessive rates and twice dropped the matter after allowing the company extensions of time which it used to mislead petitioners into withdrawing their names. When Consolidated Gas Company absorbed Brooklyn Edison Company the case was apparently prejudged in private conferences, the public hearings were mere formalities, an important presentation of the public interest was practically excluded, and the concrete result was an increase of $18,000,000 in cash dividends to stockholders compared with a meagre $6,274,000 in savings to consumers. At least $4,500,000 of the consumers' share was really based on the coal surcharge deception.

15. *Three great holding companies, which* dominate the State, controlling the distribution of about 12,000,000,000 kilowatt hours of electric energy per year, have played an important part in the breakdown of effective regulation, introducing problems of over-capitalization and intercompany transactions over which it appears that the law gives the State no effective control. As an economic matter these companies with their affiliated management and service companies are just as truly public service companies and just as clearly under the necessity of proper restraint in the public interest as are the operating companies which they control and service. The legal myth that they are not public utilities makes it possible to load the operating expenses of the operating companies, and consequently the rates charged by those companies, with payments to those affiliated companies, the reasonableness of which is beyond the power of the commission to determine.

16. *The grip of holding companies on strategic power sites on the St. Lawrence river* affords the basis for burdening consumers of St. Lawrence energy in the future with excessive capital charges. The control of this great source of power should never be allowed to fall into private hands.

17. *Municipal competition, whenever it has been attempted, reveals a measure of success* in attaining what regulation has failed to provide for the consumer. It has produced lower rates both from municipal plants themselves and from nearby private plants. The Cleveland municipal plant affords a dramatic picture of the ability of a small public plant to bring drastic reductions in the rates charged by private companies.

18. *Successful municipal plants* are operating in Los Angeles, Pasadena, Tacoma, Seattle, Springfield, Ill., Jamestown and Holyoke, to mention only the larger cities. Ontario furnishes the outstanding example of public operation on a large scale.

PART II

THE BASIS OF RATE CONTROL

1. *The standard of a "reasonable return on the fair value" of a public utility is not an objective standard based on ascertainable facts.* It is rather a vague and indefinable concept that functions as a disguise for the absence of any real standard. Its determination is largely a matter of judgment and, therefore, of endless controversy. Consequently, it gives full sway to the exercise of bias on the part of commissioners or courts and offers the best opportunities to the companies, whose resources are practically unlimited. Its difficulty of ascertainment postpones beyond reason the settlement of rate disputes.

2. *Under the principles of valuation as hitherto established and administered by courts and commissions,* "fair value" has become a means of justifying and legalizing almost every type of unearned increment, tangible and intangible, which accrues to unregulated monopoly. By the inclusion of such costless values as going value, water right values, easement values, and by the failure to make anything like complete deductions for accrued depreciation and obsolescence, companies are able to establish "values for rate-making purposes" so large that even the most prosperous and profitable enterprises make the false appearance of earning only a very limited rate of return.

3. *The unstable, unpredictable and fluctuating character of a rate-making valuation* turns public utility securities into speculative instruments and thus goes far toward defeating the object of rate regulation, which is to give the public the benefit of rates that yield the minimum necessary return on the capital contributed by the investors.

4. *When rates are fixed by reference to a fluctuating "fair value" of the property, the public must lose* when the rate base falls no less than when the rate base rises. In the latter case the consumer must pay a return on the excessive valuation; in the former case he must suffer the poor service consequent upon the fall in utility credit resulting from the decrease of the rate base.

5. *For these and other reasons stated in the following sections, "value of the property" must be abandoned* as a basis of rate-making; and unless it is abandoned, all other efforts to improve the administrative machinery of rate control will prove fruitless. The only one that seems to us a feasible substitute is the "prudent investment" or "actual cost" standard.

6. *The "prudent investment standard" cannot fairly be applied to existing property without modification.* We, therefore, propose a bill embodying the principle of the "prudent investment" basis of rate control, but making all reasonable concessions to the vested

interests of those persons who have contributed capital to the public service under a different system of rate determination.

7. *The plan proposed in our bill is designed to give the maximum of security to the investor while foreclosing the opportunities of speculative profit in public service monopolies.*

8. *The Federal Constitution, we believe presents no bar to the validity of our proposal.* But, if we accepted the verdict of those who would declare it unconstitutional, we should forthwith recommend that the State proceed to undertake outright government ownership and control of its utilities, as we are convinced that regulation can never be made effective as long as the doctrine of "reasonable return on fair value" remains the law of the land.

* * * * * *

In this report we find that the evidence before the commission presents a picture of utility companies resorting to every possible device to defeat regulation, and in large measure succeeding.

We feel that a continuance of this situation will inevitably present public ownership and operation in some form as the only solution. However, we do not feel that public opinion is yet ready for that alternative.

We, therefore, recommend a plan for rate control which we feel would make regulation workable and effective if the corporations are willing to accept it. If the corporations are not willing to accept effective regulation and succeed in defeating it in the courts, we frankly see no solution short of public ownership and operation.

We recommend, in addition to our plan for rate control, legislation enabling municipalities to undertake public competition without too great handicaps. This will put it right up to the companies to help rather than hinder regulation in order to retain the private ownership method of operating public utilities.

We are impressed with the fact that four successive legislative investigations, covering a period of more than 40 years, have found the same condition—the utilities seeking excessive profits and attempting to disguise the rate of return on actual investment by some form of over-valuation.

We predict that if the continuance of this condition necessitates another investigation there will issue therefrom a clear cut report in favor of public ownership.

Our recommendations follow:

Section 2. Proposals for Reasserting the Public Interest in Public Utility Regulation

In line with the situation as revealed by our analysis of the evidence submitted before the Commission on Revision of the Public Service Commissions Law, as contained in the subsequent pages of this report, we make the following proposals for concrete legislation which we believe will help to reassert the public interest in its public services:

(1) *Establish the prudent investment principle* as the public policy of the State for purposes of rate control. We believe that

the merits of this principle as compared with the so-called "present value" principle have been clearly and convincingly demonstrated by the evidence submitted to this Commission and by the experience of regulation in other States.

The plan suggested by Commissioner Bonbright for the application of the prudent investment standard to existing property and for its effective administration in the future has our hearty endorsement. It is incorporated in the proposed bill which forms Part III of this report, and we recommend the adoption of this bill as a means of putting the new basis of regulation into effect.

(2) *Establish a new uniform system of accounts* worked out by a committee of experts with a view to revealing completely the costs, both capital and operating, of the various classes of services. This should be definitely coordinated with the valuation plan, so as to keep it up to date automatically by including an accurate check on the service per dollar of investment represented by each integral part of the plant and by a definite method of handling retirement and obsolescence existing in part of the property. This should also include the definite elimination of all unclassified fixed capital.

(3) *Provide for a People's Counsel,* appointed by the Governor of the State, with authority to initiate and handle cases in the interest of the public before the Public Service Commission and if necessary in the courts. Provide for his full cooperation with municipalities or other consumer groups. Place at his disposal the full engineering, accounting and statistical staffs of the Public Service Commission.

(4) *Provide for a regular monthly publication* by the Public Service Commission, aiming to distribute in popular form knowledge of the utility situation as reflected in the data assembled and the cases before the Commission. This should be developed somewhat along the lines of the monthly publication of the State Industrial Commission. It should aim to create widespread public knowledge of regulation, rates in all sections of the State, the costs of the various classes of service, service charges, profits, etc. This should be handled with newspaper releases to keep the Public Service Commission always in close contact with the public.

(5) *Provide for control by the Public Service Commission over all construction* or additions to plant and equipment, however financed, in order to close this loop hole for excessive costs and overcapitalization. All expansion programs should be approved by the Public Service Commission in advance. The Commission should also have control over the contractual relations between companies subject to holding company control and the associated engineering, financial, legal and accounting companies and should have the power to disapprove of any such contract in which all the books showing the costs involved are not open to its inspection.

(6) *Authorize municipalities to undertake public competition,* if their citizens so desire, granting municipalities the power to build their own plants and distribution systems without the necessity of securing a certificate of convenience or necessity from the Public Service Commission, and power to acquire private systems by agreement or condemnation providing the cost does not exceed the cost of building a municipal system.

(7) *Authorize municipalities to serve the surrounding* territory without continual appeal to the legislature for that privilege.

(8) *Authorize municipal plants to replace private plants* at the end of the franchise period of the latter without obligation on the part of the municipalities to purchase the often antiquated private plants.

(9) *Authorize municipalities to form power districts* for the purpose of supplying electricity at cost to municipalities within the district.

(10) *Provide larger salaries* for the Chairman of the Public Service Commission, for commissioners, for the Counsel to the Commission, and higher pay for all employees with the special emphasis on raising the compensation of those now receiving less than a living wage.

We believe that the adoption of this program as a whole would greatly strengthen the assertion of the public interest in the matter of regulating the public services.

PART I

GENERAL PROBLEM OF STATE REGULATION

PREPARED BY COMMISSIONER WALSH

Conclusions and Recommendations Concurred in by Commissioners Bonbright and Adie

Section 1. Nature of This Investigation and Purpose of Public Utility Regulation Defined

Chapter 673 of the Laws of New York, being the law creating this Commission is declared to be:

> "An act to create a temporary Commission to make a thorough survey, examination and study of Public Service Commission Laws, in relation to the operation and the effect thereof, and to propose remedial or other legislation in relation thereto."

And charges us:

> "To make a thorough survey, examination and study of the Public Service Commission Laws of this and other States for the purpose of ascertaining whether the Public Service Commission Law of this State accomplishes the objects for which the system of State regulation was established."

The Commission was organized by the selection of Honorable John Knight as Chairman, and David C. Adie, as Secretary.

By unanimous vote, Honorable William J. Donovan was selected as counsel for the Commission, and was charged with the duty of preparing, and submitting to the Commission, an outline and plan for the work thereof as well as an interpretation of its duties.

Colonel Donovan was likewise charged with the duty of submitting to the Commission the name of a trained expert as Director of Research to assist the Commission in the performance of its duties.

Colonel Donovan accordingly submitted the name of Mr. William E. Mosher, Director of the School of Citizenship and Public Affairs of Syracuse University, Syracuse, New York, as Director of Research, who, being duly authorized, selected a staff of technicians and experts to assist the Commission.

After hearing the report of Colonel Donovan with the views of individual members of the Commission, the purpose of utility regulation was declared to be:

> "The establishment of an administrative non-political agency, presumably expert and equipped with all necessary skill, charged with the duty of alert supervision of, and control over, the operation of utilities so as to secure to the public an adequate service according to modern technological standards, and at reasonable charges, to secure to the utilities a fair income to make possible these services, and to protect legitimate investors in utility securities."

The outline of the Commission's inquiry, submitted by counsel, and unanimously approved by the Commission, was as follows:

PART I. *Legislative bases of Commission's* authority.*

- A. The evolution of the Public Service Law of 1907.
  1. Early history of utility regulation in New York.
  2. Background of the law of 1907, and aims of this legislation.
- B. Outstanding defects of this legislation.
  1. History of inadequacies that revealed themselves under law of 1907.
  2. History of proposed remedies for these defects.
- C. Successive legislative amendments.
  1. A recital of the legislative history of enactments since 1907.
  2. The difficulties and defects that have arisen thereunder from time to time and leading to further amendments or proposals.
- D. Existing law.
  1. Summary of present regulatory legislation over various classes of utilities.

PART II. *Commission's organization and procedure.*

- A. Mechanism of administration.
  1. Analysis of administrative organization.
  2. Analysis of personnel, limited to commissioners, counsel and chief technical advisers.
  3. Relation of commission to executive, legislature and public.
- B. Procedure.
  1. Supervision and inspection.
  2. Administrative "trials."
  3. Administrative orders and their modes of enforcement.

PART III. *Scope of Commission's jurisdiction.*

- A. Railroad regulation and control of other utilities.
  1. Railroads.
  2. Water carriers.
  3. Other transportation agencies.
  4. Transmission agencies.
  5. Private cars and industrial railroads.
  6. Other utilities.

* Throughout this outline the singular is used, though, of course, both the Public Service Commission and the Transit Commission are intended.

B. Commission's exercise of administrative discretion.
   1. Basic characteristics of administrative tribunals.
   2. Discretionary nature of the Commission's legislative Mandates.
   3. The Commission and the State courts.
   4. The Commission and the Federal courts.
   5. The maintenance of Commission's administrative independence.

C. Interstate commerce problems affecting jurisdiction of Commission.
   1. Provisions of the Interstate Commerce Act and its amendments, as applied by the courts, limiting the powers of State Commission.
   2. Practical relations between Interstate Commerce Commission and State Commission in matters involving common interests.

PART IV. *Character of Commission's activities.*

A. Extent and diversity of the Commission's task.
   1. Organization and finance.
   2. Rates and traffic.
   3. Valuations.
   4. Service and safety.
   5. General investigations.
   6. Accounts and reports.
   7. Prosecuting activities.
   8. Miscellaneous duties.
   9. Magnitude of Commission's burdens.
   10. Complexity of Commission's task.

B. Organization: intercorporate relation.
   1. The competitive principle and the regulative process.
   2. Extensions, abandonments and acquisitions.
   3. Interlocking directorates, etc.

C. Finance: security issues.
   1. Nature and purpose of security regulation.
   2. Relation of finance to regulatory activities.
   3. Administrative principles in regard to
      a. purpose of issue.
      b. size of issues.
      c. size of security.
      d. terms and conditions.
   4. Promotion of public interests and safeguarding of private rights.

D. Problems of valuation.
   1. Mechanics of task.
   2. Nature and purposes of undertaking.
   3. Ascertainment of underlying figures.
      a. original cost.
      b. cost of reproduction.
      c. depreciation.
      d. original cost and present value of lands.
      e. other values and elements of value.

E. Rate-making.
   1. Scope of Commission's rate-making powers.
   2. Methods of exercising them in determination of rate "reasonableness."
   3. Control of financial returns.

PART V. *Appraisal of existing administration and recommendations.*

A. Inadequacies and defects due to existing legislation.
B. Inadequacies and defects due to existing administrative methods.
C. Inadequacies and defects due to personnel.
D. Inadequacies and defects due to conflicts with Federal law.
E. Suggested remedies for foregoing defects.

The plan of research and method of scope of hearings, by advice of counsel and Director of Research, adopted by the Commission, was as follows:

(a) Evidence as to the existing regulatory laws and their operation and effect; including testimony of Public Service Commissioners, heads of staffs, experts, and witnesses suggested by the Public Service Commission, and their respective counsel bearing thereon.

(b) Evidence from the standpoint of the consuming public; including representatives of consumers and rate payers' organizations, experts and economists, and representative witnesses as to the actual procedure and practice of the regulatory bodies, from the standpoint of the public.

(c) Presentation of the case of the public utilities; including testimony of executives, experts, attorneys and witnesses suggested by the Research Department and the representatives of the corporations covered by the Public Service Law.

Following the plan and outline aforesaid, representatives of the three groups were duly notified to make full and fair presentation of their respective viewpoints, through submission of facts to the Research Department, and by suggestion of names of witnesses for introduction at public hearings, or suggestions to the Commission, or its staff.

In connection with, and addition to, the work of the Research Department, a series of hearings were held in New York City, Buffalo and Syracuse, at which testimony was adduced in great volume bearing upon the issues before the Commission, and in these investigations and hearings, effort was made to produce all essential facts pertinent to the inquiry, and full opportunity for the expression of all shades of opinions as to correct theory and practice pertaining to the regulation of public utilities and its effectiveness or lack thereof.

The stenographic record of the hearings consists of 5,815 pages and 201 exhibits, while 1,364 communications were received or sent by this Commission.

Public Utility Regulation a Failure in New York State

On the basis of this intensive investigation, we find that effective public utility regulation in the State of New York has broken down and that the consumers of the State have been abandoned to the exploitation of the public utility companies without any effective restraint by the Public Service Commission.

We find that the utilities themselves are chiefly responsible for this failure of regulation and that they have spent millions of dollars to thus free themselves from any limitation on their ability to charge what the traffic will bear, or, as they themselves put it, "what business judgment dictates."

As a result of the steady pressure exerted by the great utility companies to defeat the efforts of the public to regulate public services, the last ten years have witnessed a steady trend away from the true conception of the nature of public utility properties, as well as from the original conception of the purpose of public utility regulation.

Today that trend has reached the point where the State is faced with a crisis.

The facts developed by the Commission clearly indicate that unless effective regulation can be enforced the people will conclude that public ownership is the only alternative to continued exploitation by unregulated private monopolies.

For these reasons, we believe it of prime importance to begin our report with a clear statement as to the nature of property used in the public service as distinguished from property in unregulated private business, and with a reaffirmation of the original purpose of public regulation.

Public Utility Service Not Private Business

The furnishing of public utility service is not a private business, and those engaged in it should be considered agents performing a function of the State. That doctrine has long been established in regard to the railroads. It should be equally true for what are now commonly recognized as public utilities furnishing communication, light, heat, power and water. These services have all the essential characteristics back of the long established holding that the railways are public agents exercising a public function. We may quote from the Supreme Court Moffat Tunnel case:

> "Whether the use of the railroad is a public or a private one depends in no measure upon the question of who constructed it or owned it. No matter who is the agent, the function performed is that of the State. Though the ownership is private, the use is public."

In connection with these essential services it should make no difference whether the State, in one case, undertakes to perform its own functions and though the governing body selects the operators of a public service and finances it or whether the State authorizes private persons to undertake to perform a function of the State. The difference is solely one of method. The business which is done is still essentially public business, the objects of the corporation are still public objects, accomplished through the method of selecting public agents and the grant of a franchise to a private corporation is simply one of the methods of selecting an agent to perform a public function.

The collection of taxes has always been considered one of the most important prerogatives of government. Today the privately owned public utilities in the United States collect an annual revenue which is several billion dollars larger than the total taxes collected annually by our national, state and local governments combined.

The annual revenues of the privately owned public utilities today exceed ten billion dollars.

If you divide that among the families of the nation you will find it means an average burden for a family of something in excess of four hundred dollars per year.

Our people pay this not only in the monthly bill for electricity, gas or telephone, but also as an element in the cost of nearly everything which they purchase.

The Supreme Court of the United States long ago asserted that it was as vital that the State should retain its control of tolls upon public highways as it was that it should not surrender or fetter its power of taxation. Through public utility regulation the State aims to retain control of tolls which today bulk vastly larger in the national income.

Regulation Corresponds to State Control Over Taxation

The foundation and primary purpose of public utility regulation is the necessity of preventing the taking of an unfair profit, that is, of taking an unfair toll, out of public business by its private agents.

The power to spend such an enormous sum is quite as important as the power to collect it. It represents a social and political force of unparalleled influence. And because of a common purpose and a co-ordination of interests through banking houses, interlocking commercial enterprises and affiliated newspapers and magazines, these privately chosen operators of public business exercise an influence upon public opinion and public money, and upon law making of importance, which is inconsistent with the maintenance of democratic institutions. The problem of regulating public utilities is deeply involved in the larger problem of retaining and preserving an essential right of self-government.

The public has little recognition of the enormous pressure which the public utilities exert upon government.

In the last few years the companies have spent millions of dollars out of earnings to prevent rate regulation in accordance with

standards of justice which have the approval of an overwhelming majority of impartial students of public service regulation.

The enormous amounts spent for advertising and publicity by the public utilities have recently been exposed, but, in general, the public is not aware of the fact that, for example, the New York Edison Company has spent over $5,000,000 to fight the present Manhattan rate case, still undecided by the Public Service Commission, with the prospect of years in court at the will of the company; and that this instance is not exceptional, the telephone company already having expended over $6,000,000 for the same purpose, all of which is paid for by the public in excessive rates. These vast expenditures are constantly being made by utility companies, while the annual appropriation of the State of New York for the regulation of its utilities has never reached the sum of $900,000 since the establishment of the Public Service Commission.

With this persistent and successful effort of the utilities to destroy an effective regulation, it would seem impossible to enforce it along the lines originally intended when the law creating the Public Service Commission was enacted.

The folly of the State's attempt to match dollars with these agents operating public business with private property and forcing the consumers to pay the cost of their defeats, must be obvious.

Failure to Recognize Nature of Property Right in Utilities

The defeat of public utility regulation in New York State has been brought about largely by the failure of those in control to recognize a clear distinction between private property right in tangible property used in a public business and private property right in the business itself.

This conclusion does not mean that the use of private capital or the control of capital in constructing and operating public utility, must be eliminated. It means only that the legal right to proprietary capital and resulting proprietary control of public business has been proven to be inherently hostile to an adequate public control.

As a matter of fact, the amount of proprietary capital in public utilities is relatively small compared with the amount of borrowed capital.

Public utility regulation, therefore, in its last analysis means public supervision or control of private agencies, granted monopoly rights to levy an annual toll aggregating more than $10,000,000,000 or about $400 out of the income of every family in the United States.

Faced with these facts one cannot maintain that Public Service Commissions exercise a mere judicial or quasi-judicial function.

The Public Service Commission is in reality an arm of the State legislature, designed to control private agents empowered by law to summarily collect a modern form of taxes for the furnishing of essential services to the inhabitants of the State.

Private Competition in Public Utilities Fruitless

Originally it was assumed that competition would assure the consumer adequate service at reasonable rates. If a corporation failed to render adequate service as reasonable rates, it was assumed that another corporation would immediately enter the field to undersell the first. But it was early found that, in the field of these essential public services, competition was wasteful. Three gas pipes in a street, which could just as well as be served by one, obviously represented unnecessary investment of capital.

A single large plant could produce and distribute electricity to a given district at a lower cost than two or three small plants.

Consequently the law was reframed to grant the various public utilities monopoly franchises in their especial fields.

Public utility regulation followed naturally as a method of protecting the public against these companies, exercising special privileges under the law.

Such regulation came originally as a substitute for competition in assuring consumers reasonable services at reasonable rates.

Regulation Defined

Public utility regulation may therefore be defined as the establishment of an administrative non-political agency, presumably expert and equipped with all necessary skill, charged with the duties of alert supervision of, and control over, the operation of utilities so as to secure to the public an adequate service according to modern technological standards, and at reasonable charges; to secure to the utilities a fair income to make possible those services, and to protect legitimate investors in utility securities.

President Matthew S. Sloan of the New York Edison Company and other electrical properties of the Consolidated Gas System, at the beginning of his testimony, made very clear his conception of the importance of such regulation. He said:

> "When you plan to keep State regulation effective and study how to improve the means of doing so, you are doing something to conserve what I believe to be an important and essential American institution. Only if State regulation cannot and does not succeed will there arise the need of considering other methods of public control."

We believe that this expression of the President of one of the greatest electrical utilities in the country is inconsistent with the fact that, during the last six years, his Company has spent more than five million dollars in an attempt to defeat the demand of the City of New York for a reduction in electrical rates to householders and other consumers which have remained unchanged for thirteen years.

We believe from all the evidence presented that unless the utility companies reverse their attitude it will be impossible to make regulation effective.

Section 2. Appeal to Courts of Valuation Nullifies Regulation

We must assert at the start our conviction that the unlimited power of utility companies to resort to the courts in all rate cases means the inevitable failure of effective regulation. No one will deny the right of utility to court protection against arbitrary and unfair action on the part of regulatory bodies. But it seems plain that, whether the corporations resort to such appeal or not, as long as the right is unlimited, regulation exists merely on sufferance.

There exists today no authority with final power to fix a definite rate for a public utility. The New York law purports to give the Public Service Commission power to fix rates. But when the Commissioners undertake to do so, basing their decision on their best judgment of conditions involved, the way is always open for the company to appeal to the courts.

The courts, in turn, have no power to fix a definite rate. Their power is limited to deciding in the instant case whether the rate already fixed is or is not confiscatory. In doing this they can only declare that certain elements of value must be given weight in fixing a proper rate. Then it is the duty of the Public Service Commission to attempt to fix another rate in accordance with the expressions contained in the opinion of the Court.

But years have elapsed in the process. Conditions have changed. There are new elements to be adjudicated. The new rate set by the Public Service Commission supposedly based on the Court's opinion, may again be resisted in the Court. The chain is interminable.

This results in freeing the utilities from all effective regulation.

Recently the corporations have used the present value lever to free themselves from adequate regulation by the State regulatory body. This has the practical effect of transferring the establishment of maximum rates to the Federal courts. Although theoretically the Courts cannot actually fix rates they can dictate to the Public Service Commission the rate base which to all intents under present regulatory practice determines the maximum rates which the corporations may charge.

Utility Heads Express Ultimate Dependence on Courts

The determination of the public utility corporations to resort to the Courts whenever their claims are not recognized by the Public Service Commission and their complete dependence on the Courts to fix the maximum rate base for their charges was asserted before this Commission by leading utility executives who appeared as witnesses.

Floyd L. Carlisle, Chairman of the Niagara Hudson Power Corporation, testifying at Syracuse (testimony, p. 3727), held that the legislature could only make changes in the administrative provisions of the law, that the fundamentals are without the power of the state, and his reliance is necessarily "on the Federal Courts."

George B. Cortelyou, President of the Consolidated Gas Co., testifying concerning the contract basis of valuation making (testimony, p. 4999), said that he did not look with favor upon either mandatory or voluntary contracts and added: "But I believe our hope for the immediate future lies in progress along the lines of the decisions of the Courts." After remarking that counsel for the company had advised him that the contract plan was purely unconstitutional ad subversive of the guarantees, he continued: "With every desire to co-operate reasonably in every forward step in utility management and regulation, *we feel that these matters of valuation and return will preferably and necessarily be left with the Courts*" (p. 5009).

Similarly President Matthew S. Sloan, of the New York Edison Co., and of the other electrical properties of the Consolidated Gas System, testified (p. 5443) that conceivably the decision in the long drawn out New York Edison rate case, which has already cost the company over $5,000,000, might be reviewed by the State or Federal Courts. Pressed on this point he admitted that his final reliance on the value of the property "is on the Courts and not on the Public Service Commission" (p. 5444).

Finally the evidence before the Commission shows that W. C. Langley, director of the Long Island Lighting Co., and Charles T. Russell, Vice President and General Counsel of the New York Telephone Co., both indicated that their dependence is on the Courts (pp. 5073 and 5747).

Mr. Langley proposed resort to the Courts in case the Public Service Commission did not sanction the earnings which would support the financial structure of the proposed Long Island Capital Corporation, which we deem indefensible from the standpoint of the public or legitimate investors.

New York Telephone Rate Case

We wish to call special attention to the protracted New York Telephone rate case as an instance of the breakdown of effective regulation, resulting from the insistence of the company on a fictitious reproduction cost valuation and its dependence on the Federal Courts to guarantee rates based upon such a valuation. Developments since the completion of this Commission's formal hearings show that this case, which started in August, 1920, is still far from settled. As asserted by counsel for the company in recent hearings before the Public Service Commission at Albany, there have been no legal telephone rates in effect since 1922.

We consider this case the limit of absurdity in the valuation method of adjusting public utility rates. The ultimate result of this method is to render regulation inoperative, to coerce public service commissioners into a supine fear of over-stepping court-drawn lines, and to produce absurd elements in the rate base which add materially to the general confusion which has defeated any effective state control of its utilities.

The following historical summary of this case is itself a sufficient argument for the throwing out of the whole proposition:

Summary of Telephone Case

Aug. 20, 1920: Application of company to increase rates in New York City. Public Service Commission instituted statewide case.

Mar. 17, 1921: Interim Order—Knocked out 8% discount and granted company 20% rate increase. This later reduced 10% on application of the City (Case Nos. 377 and 7720).

Mar. 3, 1922: Commission ordered temporary decreases in rates in New York City and most upstate exchanges. The Federal Courts, by order dated June 12, 1922, abrogated these two orders.

Jan. 25, 1923: Commission issued order increasing by 5% rates to be charged in New York City and balance of State.

Jan. 23, 1924: Company applied to Commission for increases throughout the State.

Feb. 1, 1924: Company petitioned for immediate temporary increases of $7,500,000, but this was denied by Commission July 17, 1924. Decision 3 to 2, Prendergast voting with Company.

April 26, 1924: Company asked Federal Court to restrain enforcement of Commission's rates. Asked 14½% increase throughout the State pending permanent injunction.

May 1, 1924: Knox granted and Statutory Court confirmed temporary injunction allowing 10% surcharge on rates in New York City but no increase upstate. Fertig denied right to intervene.

Sept. 2, 1924: Oeland appointed special master to consider confiscatory issue. Began hearings October 14, 1924, and issued report March 11, 1929. Meanwhile Public Service Commission continued hearings on application for permanent increase filed January, 1924.

May 26, 1926: Commission ordered $11,095,373, or about 16% increase in rates in New York City but none upstate. Prendergast and Van Namee dissented in long minority opinion justifying larger increases.

Aug. 10, 1926: Company complained to Court about this decision and Court directed that this complaint be referred to Oeland.

Mar. 11, 1929: Oeland report to Court practically sustained company's claims. Estimated Oeland recommendations would add about $20,000,000 to State's annual phone bill. Following report American Telephone and Telegraph stock rose 2 points on the market, a gain of $25,793,828 in the market value of the outstanding shres.

May 8, 1929: Master's decision argued before Statutory Court.

Nov. 7, 1929: Statutory Court issued opinion drastically reducing the valuation set by the Master, cutting the rate of return to 7% as compared with 8% allowed by Prendergast minority and the Master, and dealing rather severely with some of the corporation's pet valuation theories.

Dec. 27, 1929: Actual date of the order issued by the Statutory Court on the basis of the above opinion.

Jan. 27, 1930: Telephone Company announced new rate schedule which it claims is based on order of Statutory Court with $133,000,000 added to the rate base to bring it up to June 30, 1930. Includes not only flat increase but changes in zone charges and differentials.

Jan. 29, 1930: Telephone Company summoned to Albany by Public Service Commission for hearing on new rates which it refused to file with Commission on ground they are merely a carrying out of a Court order.

Jan. 31, 1930: Public Service Commission announced temporary rate schedules, involving slight reduction of proposed company schedule.

Feb. 1, 1930: Temporary new rate schedule goes into effect (pp. 2758-9).

Hearings are now in progress before the Public Service Commission looking toward fixing of a permanent rate schedule under the order of the Statutory Court. Meanwhile the New York Telephone Company is broadly hinting that it will again take the matter to the court if a fair return is not forthcoming on the valuation which it claims. This case, down to the decision of the Master, involved 62,864 pages of testimony and 4,323 exhibits. It is still going, constantly piling up testimony and exhibits. This case makes plain that during recent years there has been no effective state regulation of the telephone industry in New York State.

Fair Value Is a Judicial Myth

The variety of conclusions reached in the course of this case is dramatic evidence that the concept of "fair value," as an objective, provable fact is a judicial myth. It proves to be largely a matter of opinion even among experts. In brief, as of the same date, there were six different conclusions as to the fair value of the New York Telephone Company for rate-making purposes, all purporting to be based on the principales laid down by the United States Supreme Court. On the property in use in intra-state business these varied from a low of $367,000,000 to a high of $615,000,000, as of June 30, 1926. Including also the variations in the opinion as to the fair rate of return, the various estimates of the profit to which the company was entitled on intra-state business ranged from $25,635,000 up to $49,200,000.

Here are six different parties all trying to determine the legal return to which the New York Telephone Company is entitled and

the range of guesses is nearly 100 per cent. The separate estimates of fair value June 30, 1926, fair rate of return, and profit to which the company was entitled, all based on intra-state business, were:

ESTIMATES OF FAIR PROFITS FOR NEW YORK TELEPHONE COMPANY

(Intrastate business, July 1, 1926) (pp. 2768 and 2799)

	Fair Value	Rate	Fair Return
Majority of Commission	$366,915,493	7%	$25,635,000
Statutory Court	397,207,925	7%	27,804,555
Minority of Commission	405,502,993	8%	32,480,000
Master's report	518,109,584	8%	41,448,777
Company claim based on Whittemore appraisal	528,753,738	8%	42,300,299
Company claim based on Stone & Webster.	615,000,000	8%	49,200,000

In our opinion the wide spread between these estimates proves the impossibility of any degree of certainty in rate making. Regulation is lost in the quicksands of many hypotheses.

The single item of "going value" is estimated all the way from a grudging $10,000,000 allowed by the Commission in deference to the Courts (p. 2775) up to approximately $54,000,000 included in the Stone & Webster appraisal (p. 2768).

Furthermore, now that the final settlement of the case bids fair to wait until two years after the final value set by the Statutory Court, a new body of capital representing the added investment in that period must be valued, the question of depreciation must be reopened, in fact, the case in close to where it started.

Changes in Court Opinion Add to Uncertainty

Changes in Court opinion corresponding to changes in the economic environment contribute an element of instability to this basis of rate regulation in addition to the variation in the opinions of the various parties who make the original estimates. The Court decisions which have been handed down on the question of valuation show that Court opinion on the subject is in a state of flux. If the next ten years should develop a definite downward trend of prices it might well serve the purposes of the corporations to shift their entire theory. With their ability to present a far more impressive case than representatives of consumers the ruling of the Courts may take a new turn.

Valuation As a Means of Extortion

We see in the two appraisals offered by the New York Telephone Co., clear evidence of the fact that the utility corporations are using the valuation principle as a means of extorting the highest possible return from the public.

Both of these appraisals aimed to show value on the basis of reproduction cost and both were supposedly made by the most competent valuation engineers. Between them they cost the company more than $1,000,000. Yet a comparison of the various items in these appraisals suggests that they amounted to a little more than a contest to see which group of engineers could make the highest guess. Stone & Webster won with a guess for the entire property more than $106,000,000 in excess of that arrived at by the company's own engineers under the direction of Mr. Whittemore.

The two appraisals were as follows:

NEW YORK TELEPHONE COMPANY APPRAISAL AS OF DECEMBER 31, 1925

(Page 2768)

New York City	Whittemore cost new	Stone & Webster cost new
Plant in service	$371,137,000	$428,500,970
Working capital	13,915,000	13,423,804
Preliminary organization costs	1,380,000	3,823,000
Going value	34,844,000	39,796,000
Cost of financing	.....	19,898,000
Total	$421,276,000	$505,441,774
Balance of State		
Plant in service	$147,759,000	$158,146,015
Working capital	3,809,000	5,897,801
Preliminary organization costs	543,000	1,386,000
Going value	12,650,000	14,530,000
Cost of financing	.....	7,265,000
Total	$164,761,000	$187,224,816

We note that the estimates for the value of the physical plant in New York City differ by as much as $57,363,970 or approximately 15 per cent, that the estimates for physical plant throughout the State differ by $67,750,985 or more than 13 per cent, and that these are not estimates submitted by opposing parties but are both submitted by the telephone company.

A 7 per cent return on the difference between these estimates alone would mean a difference of $4,750,000 in the amount the citizens of the State would be called upon to pay annually for their telephone service.

The difference between the two estimates, including all the intangible items, would mean a matter of about $7,400,000 a year to the telephone users of the State.

Perhaps the clearest way to make the valuation question concrete is to point out that on the basis of the Stone & Webster valuation submitted by the company telephone service would have cost the people of the State approximately $25,000,000 a year more than it would have cost on the basis of the Public Service Commission's 1926 decision and about $20,000,000 a year more than was allowed by the Statutory Court.

The difference of opinion between the majority of the commission who rendered the 1926 decision and the minority composed

of Chairman Prendergast and Mr. Van Namee involved about $5,000,000 a year to telephone users in the state. Throughout the two opinions, which discuss at considerable length the various elements of valuation, the confusion of mind which results from the raising of this question is apparent.

Even clearer is the fact that the Commissioners are forced to make their decisions with eyes ever on the Court. The true economics of the situation from the viewpoint of consumers must take a secondary position.

Valuation As a Means of Defeating Regulation

Such facts indicate to us that the public utility corporations have found in the concept of valuation for rate making purposes the most effective means of undermining effective regulation. The present crisis appears to have been brought about largely by their attempt to use reproduction cost valuation as a means to squeezing the last possible cent out of consumers.

Where Commissioners have been ready to accede to valuations closely approximating those demanded by the companies, the door has been open to charging approximately what the traffic would bear. Where Commissioners have proved obdurate in their attempt to defend the public, the utilities have appealed to the Courts.

Appeals to the Courts have meant injunctions, followed by surcharges allowed by Justices not trained in utility economics. Long periods have elapsed in which the authority of the State to determine rates has been in abeyance. The companies have overwhelmed the consumer's side of the case as a result of their ability to spend millions of dollars of consumer's money in the preparation of their evidence. Inevitably the conclusion has been the establishment of precedent a little closer to the full demands of the corporations.

The effect of these decisions is not only to establish a precedent for still higher valuations and consequently larger tolls exacted the part of Public Service Commissioners. They grow ready to negotiate and compromise with the corporations, lose their sense of initiative and hesitate to undertake rate cases when they know that the result will inevitably be a protracted and unequal battle in the courts.

The Old Issue of Over-Capitalization

The valuation question does not really embody a new issue. It is an old issue in new dress. A generation ago it was being met with under such terms as "watered stock" and "over-capitalization."

In most respects the reproduction cost new theory of valuation is a blanket term covering the latest devices for capitalizing expected profits, that is, establishing values for rate making which have never been actually contributed in the form of money put into the industry by investors.

The story of the Consolidated Gas Company, presented to the

Commission in great detail, reveals the earlier and cruder form of injecting water into the capitalization upon which a return must be earned. The men who presided over the birth of this company first formed a pool among supposedly competing companies, raised the price of gas to consumers and then capitalized the merger of these companies on the basis of the market values of the securities produced by the resulting excessive prices. They had previously secured the passage of an act through the legislature which enabled their appraisers to create the appearance of value behind their new securities by determining upon a so-called fair value, including $7,781,000 for their franchises. In later years Courts agreed that the excessive valuations must be allowed to stand because they were specifically authorized by law but did not deny that over-capitalization existed from the viewpoint of consumers (Supplementary Memorandum by Community Councils).

Mr. Justice Peckham, writing the opinion of the United States Supreme Court in the case of Wilcox vs. Consolidated Gas Company (212 U. S., 19, 42 et seq.), said:

> "The value of the franchises of all the companies was set at the sum of $7,781,000. * * * The result was that the amount of stock issued by the Consolidated Gas Company was increased by $7,781,000 representing a value of franchises which was agreed on by stockholders in the companies, and which had never cost any of them a single penny."

Later, in the process of merging the electrical companies, the evidence shows, properties were bought in through the issuance of purchase money and other mortgages in the full value of the acquisition and an equal amount of stock was them issued to validate the bonds, this stock originally representing no investment at all.

The Purpose of Over-Capitalization

The testimony before us indicates that the purpose back of this constant attempt to justify excessive valuations or capitalizations is to secure the right to charge rates which would otherwise be instantly recognized as excessive. Over-valuation, if supported by the Courts, of course, defeats the very object of State regulation.

It is interesting to note that this purpose was aptly described more than forty years ago by Chairman Gilbert of the 1886 Senate Committee which investigated the first Consolidated Gas Company merger. To this part of his report Chairman Gilbert had the assent of his colleagues, although in the face of the law secured by the original creators of this corporation, they were forced to admit that the over-capitalization had been legalized.

To paraphrase Senator Gilbert in order that his remarks may be applied directly to the present break-down of effective regulation resulting from the exorbitant claims of utility companies.

The capital of a company may be regarded as the basis on which the per cent of profits is computed. These profits contribute an

important element in the prices of the various services to consumers. The amount of this element of cost is determined by two factors, the amount of capital on which the rate of return is reckoned and the rate of return itself. The increase of either will ultimately involve an increase of cost to the public or obstruct the operation of other causes tending to its reduction.

It is a matter of indifference so far as the immediate result to the consumers is concerned, whether the nomial capital is doubled without increasing the actual capital, or the rate per cent of the return is doubled. But in the long run the effect is very different. Under a scheme of over-capitalization unreasonable charges are comparatively easy because they are made under a disguise which shows a low rate of return. Rates which involve a profit of 7% seem reasonable and therefore tolerable, while rates involving a profit of 14% might seem unreasonable and intolerable. Fictitious capitalization, therefore, becomes a cover for unjust and oppressive exactions.

Senator Gilbert asserted that until fictitious capitalization ceased, business could not rest upon a stable basis (Community Councils Supplementary Memorandum).

Instability an Outstanding Characteristic of Present

The evidence adduced in the present inquiry is a complete testimonial to the accuracy of Senator Gilbert's observations. More than forty years have passed and the problem of protecting the public interest in the public service industries is no nearer solution. The explanation is that we still have the resort to fictitious valuation by the utility corporations as a cover for unjust exactions against the public. To the extent that the State attempts to curb or control it in one form the legal and accounting experts of the corporations devise new forms.

Ficitious capitalization today takes the form of "fair" value including the valuation at reproduction cost of obsolete or nearly obsolete plant and equipment, the invention of a large assortment of construction overheads, the discovery of "going value" covering such old terms as goodwill, franchise and expectation of profits, and the inclusion in the rate base of excessive reserves in addition to enormous accumulations of surplus profits. The total value of a utility property inflated by these means is utilized to persuade commissions, Courts, and the public that rates are insufficient to provide a fair return of the investors.

Actually this method is creating an unstable basis for the utility industries which threatens not only the continuance of regulation but also the integrity of the capitalization itself.

Today the demand is for an honest and stable rate base in order to save regulation from the maze of litigation into which it has fallen. But no stable rate base will be found so long as the corporations can make good their determination to secure higher profits by claiming rate bases largely in excess of the money actually put into the industry by investors.

Corporation Figures Reveal the Absurdity of the Situation

We find in the figures offered by the major corporations serving New York City clear evidence of the attempt to use fictitious valuation to prove that existing rates are providing investors with very meagre profits. Actually these figures present an absurd picture which the corporation executives themselves are unable to explain.

Chairman Cortelyou of the Consolidated Gas System, Vice President Nickerson in charge of its finances and accounts, and President Sloan of the New York Edison Company and the other electrical properties, all testified that the rates in effect were not yielding the return on the present value of the properties in which they were entitled under Federal Court decisions. In most cases they testified, the rates were not providing a fair rate of return even on actual investment. They said, however, that these rates were good business, i. e., dictated by "good business judgment," that they were in general adequate to enable the companies to obtain all the new capital required to properly service the communities, and they admitted further that the companies were able to pay good dividends on their common stock (pp. 5031–4, 5141–4, 5610–11).

Such testimony exposes the absurdity of the whole valuation claim which has gone so far to wreck public utility regulation. The companies are expending great sums of money and are making extreme efforts to secure rulings from the Courts to the effect that rates dictated by good business judgment and adequate to secure new capital are confiscatory under the 14th amendment to the federal constitution. Unquestionably such admissions show that the valuations of these properties could safely be reduced not only below the elaborate figures for present value built up by the engineering and accounting forces of the corporation but also below the actual investment figures on the books of the corporations.

As will be shown later in this report, the actual investment figures on the books of these corporations include a very considerable amount of excess resulting from the early watering of the stocks, amounts which are made to retain a show of reality by the inclusion of much antiquated or obsolete property carried for capitalization purposes at full present value.

The duplication involved in this process will be found in the huge reserves which should long ago have been used to retire such comparatively worthless plant and equipment.

The conclusion is inevitable that these excessive valuations are fought for and maintained in order to secure the right to maximum rates considerably above what would be dictated by good business judgment. The effect is practically to give the executives of these corporations freedom to charge rates which will yield a maximum of profit to their investors. Public Service Commissions are estopped by the threat of judicial interference from enforcing lower rates which might otherwise seem to them justified in terms of reasonable cost to the public of these services.

Rate Making by Valuation Method

We believe that a picture of rate making by the valuation method shows how it destroys regulation. We paraphrase the testimony of Commissioner Goldberg of Massachusetts (pp. 1588–1593).

A case is brought before the Commission by complainants who put in such evidence as they can gather. As the public generally has little money available for the hire of experts, the evidence is probably meagre. The company replies that it must have time to make a valuation of its plant to determine what it is entitled to earn. They take from two to six months, perhaps more. They present it with experts getting perhaps $200 a day. The public has not the resources to meet such a case but does the best it can. More time elapses while the public representatives attempt to consider and answer the company's evidence. Then the Commission attempts to digest some thousands of pages of evidence and makes its order.

This does not end the case. If the Commission does not grant 8 per cent on what the company claims as its valuation, the company appeals to the Federal Court. Some courts will act like a nickel in the slot machine, the company drops in its nickel and gets its injunction. A Master is to be appointed to take evidence and it may require months to agree on a Master. Then the Master must try the case de novo. The complainants must spend more money to get experts and the company spends more money. The evidence goes to greater length than in the original case. Then the Master must decide the case himself, must review the great volume of evidence without a corps of assistants.

Masters are generally inclined to the belief that if evidence is not contradicted it must be believed. That favors the utilities because they can put on witnesses to testify on matters concerning which the public representatives may have neither the knowledge nor the facts to refute. Probably another year elapses in this process and the Master makes his report. Then the statutory Court passes on the Master's report and renders its decision. All this takes time. Then there is an appeal to the Supreme Court, where you take your turn. The case is argued before the Supreme Court and decided. Perhaps five years have elapsed, conditions have changed, new values have been created to be adjudicated, and besides, the Supreme Court cannot make rates. Only the Public Service Commission can make rates. So the whole proceeding may start over again.

Under such circumstances it is small wonder that Commissioner Goldberg said: *"I believe, and I think my colleagues on the Commission believe that the reproduction theory carried out and insisted upon would mean in effect the end of effective regulation"* (p. 1588).

The effect of the use of the reproduction cost valuation theory by the utilities upon the iniative of Commissions in protecting the public is clearly reflected in the testimony of Commissioner Lunn, who said: *"With me there is a veritable fear of starting a rate case and getting trimmed because of the reproduction cost theory. And I would avoid every rate case possible, as long as the reproduction cost theory is going to rise up to mock us and rise up to mock the Courts some day"* (pp. 999–1000).

Companies Seek to Defeat the Public

Perhaps the clearest evidence that counsel for the utilities utilize the valuation maze to defeat the public in the matter of regulation came from Mr. Harold Evans, lawyer and former member of the Pennsylvania Commission. Mr. Evans testified as to one case in which "on the first day of the hearing the utility put into the record the entire record of a previous valuation proceeding, which comprised 5,000 printed pages, and that was dumped into the record of this rate case, and the result was that when the case was decided an appeal by the public, who were parties to it, was absolutely out of the question because of the cost of printing the record" (p. 4135).

Mr. Evans testified further that a bill was introduced at the last session of the Pennsylvania Legislature limiting the amount of the record that would have to be printed in such a case but that it was finally killed by the utilities because they did not think it to their advantage. He continued:

> "And I have had very good friends of mine who are attorneys for the utilities frankly say to me, 'The public will sooner or later get tired of spending money for costs and it is to our advantage to increase the costs'" (p. 4135).

We are impressed with the patent fact than any valuation method, which enables the companies to inflate the cost of regulation, is distinctly to the advantage of the utilities as against the public.

We are, therefore, convinced that the whole present valuation procedure enables the utilities to evade the purpose of public utility regulation. The road out of the present difficulty must be found in more far-reaching measures which will curb the efforts of the companies to drag the process of rate determination into the Courts.

Section 3. Over-Valuation Takes Place of Over-Capitalization

Our study of the effect of constant appeal to the Courts on valuation convinces us that perhaps the greatest menace to continued private operation of utility companies is the impulse of those in control to over-capitalize them in the hope of squeezing out larger profits than private investment in a public monopoly would warrant. To a large extent, however, the old mehod of issuing watered stock has given place to the more modern method of over-valuation, perhaps with the stock split two, four or even one hundred for one as a means of concealing the high rate of return on the actual investment of the owners.

It is a relatively simple matter for the corporations with their enormous resources to convince the Courts that the values they set

up are not exaggerated. Frequently the Courts take into account the fact that past earnings have justified these values and that investors have purchased the securities in good faith on the belief that such earnings will persist.

As long as companies, which enjoy a monopoly in their field of essential service, can convince the Courts that values built up along these lines are legal, there appears good ground for their contention that as a private business they are not over-capitalized. But the effect on regulation appears in the crisis which the State now faces.

This crisis has developed because as a public business carried on by private agents the utilities are so far over-valued as to render regulation almost meaningless where rates are to be determined on the basis of such values. Even if their present capacity to exact profits is not over-capitalized, their capacity to serve the public is.

If the private interests in control of the utilities had been satisfied with a good return on the private capital actually put into the business properly depreciated and retired when obsolescent, there would be no problem of regulation. The public will pay without complaint rates which afford a legitimate return on capital actively and efficiently employed in public service. But when the rate base includes an accumulation of obsolete and inefficient plant, plus reserves which should have been used for its retirement, plus good will or franchises capitalized under some new designation, the public is bound to grow more and more dissatisfied until it realizes that public ownership is its one resort.

Consolidated Gas Company Affords Early Example of Over-Valuation

The Consolidated Gas system which dominates the electrical and gas services of New York City and its environs is an outstanding example of the defeat of regulation by over-valuation resting on Court opinion. Its executives openly admit that it cannot charge rates which will support the theoretical value for which it has won Court approval by the expenditure of huge sums of consumers' money.

The answer of the Consolidated Gas Company to the charge of over-capitalization, advanced in the course of our hearings, reveals a close parallel to the New York Telephone case already discussed at length. It suggests that consumers of New York City are the victims of the same procedure in regard to all of their major utilities. President Cortelyou of Consolidated Gas, in his statement to the Commission, said:

> "No public utility has had its property and franchises so thoroughly and repeatedly scrutinized and investigated as has the Consolidated Gas Company. Its property, the investment therein, the present value thereof, the integrity of its account, and like matters, have been found and upheld by the highest courts. Three times it has been before the courts to prevent the confiscation of its property by legislative enactment; and, each time the case was carried by the city and state to the Supreme Court of the United States (212 U. S., 19, January, 1909; 258 U. S., 165, March, 1922; 272 U. S., 576, November 1926)."

His statement shows that in a single one of these cases the evidence, exclusive of exhibits, comprised about 20,000 printed pages, which suggests the tremendous bulk already attained by evidence in the telephone case. It shows a similar effort to set up a legal basis for a profit greater than is warranted to by the actual investment of private capital in its public business.

The judicial opinions cited as supporting the claims of the company do not always refute the contention that it is over-valued for the purposes of a regulated public service. The opinion of Mr. Justice Peckham, already quoted as pointing out that the $7,781,000 capitalized value of the original Consolidated Gas franchises never represented a single penny of actual investment by the stockholders, is a case in point (212 U. S., 19, January, 1909). His opinion conceded that such franchise value was originally a capitalization of large dividends legalized by a special act of the 1884 state legislature. He said:

> "We think that under the above facts the courts ought to accept the valuation of franchises fixed and agreed upon under the act of 1884 as conclusive at the time. The valuation was provided for in the act, which was followed by the companies, and the agreement has always been recognized as valid and the stock dealt in for more than 20 years past on the basis of the valuation and the stock issued by the company."

Actually, although it may be impossible to attack the value set up by the company on its books legally as not representing the Court interpretation of investment, it can be attacked as not representing a capitalization of existing capacity for public service and consequently as a device for undermining regulation.

Consolidated Gas Valuation Is Heavily Watered

We feel that the evidence is persuasive that from the point of view of effective regulation the Consolidated Gas system is over-capitalized in this more modern sense. We do not mean that it has at present an excessive amount of securities outstanding in the hands of the public, although when its no par common stock is treated as having a book value based on the enormous reserves and surplus this may actually be the case.

We mean that the capital account is much larger than is necessary to produce the services. We believe that we are conservative when we assert that on this basis the Consolidated Gas System is over-valued to the extent of between $150,000,000 and $200,000,000.

Evidence submitted by Vice President Franklin H. Nickerson of the Consolidated Gas Company (see Additional Information, p.

109) shows the fixed capital not classified by prescribed accounts for the entire system December 31, 1928, at $161,720,073.24. This represents a reduction of $31,656,297.08 from the preceding year when the total amounted to $193,376,370.32.

For a proper understanding of the significance of the huge total of unclassified fixed capital and its implications in connection with the over-valuation of the Consolidated Gas properties, it is necessary to know how the greater part of the reduction in unclassified fixed capital between December 31, 1927, and December 31, 1928, came about.

The greater part of the reduction resulted from the disappearance of $28,892,489.72 of unclassified fixed capital from the books of the Westchester Lighting Company. This total very closely approximated what appears to have been the historical watering of the original capitalization of this company. In connection with the request of the company for the right to issue certain securities the Public Service Commission apparently felt that this item should be eliminated.

According to Mr. Nickerson's testimony, the Commission found that at least $13,879,646.33 of this unclassified fixed capital represented no value and ordered the company to deduct $3,679,646 from its surplus account and to set up the remainder as a suspense account to be amortized over a period of 40 years. To quote Mr. Nickerson:

> "The Westchester Lighting Company accepted the order of the Commission and in compliance therewith, reduced its fixed capital accounts as of December 31, 1928, by the sum of $13,879,646.33, thereby eliminating every dollar anyone could fairly allege to be possible inflation in its accounts" (Presentation, p. 81).

This is an important admission. It indicates that nearly half of the fixed capital not classified by prescribed accounts as of December 31, 1927, on the books of the Westchester Lighting Company was authoritatively recognized as inflation.

The Public Service Commission's order (Case No. 2,285), dated July 31, 1928, said:

> "That the amount of $13,306,117.90, representing the excess of reported fixed capital, viz., $53,809,118.37 as shown on the books of company over the final corrected value of the physical property of the gas and electric departments at December 31, 1925, namely, $40,503,100.47, of the Westchester Lighting Company, as found by the commission shall be debited to the account 'Suspense to be amortized' and shall be amortized, etc."

It is just as important, in attempting to go below the figures on the books of the Consolidated Gas System to find the hidden inflations, to discover what became of the balance of the $28,892,489.72 of unclassified fixed capital which disappeared from the Westchester Lighting Company books during 1928.

In the first place the classified electrical capital of the company was increased from $9,182,000 to $29,525,671, although actual net additions through construction during the year amounted to $4,788,299. Similarly the company's classified fixed capital used in its gas business increased by $14,079,000 to $30,442,029, although net addition through new construction during the year amounted to only $2,847,553.

In other words, $4,393,701 was added to the classified electrical fixed capital and $11,231,447 to that in the gas business by a mere bookkeeping transaction. Incidentally coincident with this large bookkeeping addition to the fixed capital in the gas business the deduction for retirement reserve was raised from 3 to 5c per thousand cubic feet of gas, suggesting that the fixed capital account had been loaded with old equipment to be retired.

There is little question but that these bookkeeping additions to the classified fixed capital of the Westchester company represented a capitalization of plant and equipment that should have little more than junk value. The Commission figures show that the company now buys all its electricity and a large part of its gas from more modern plants in the system. If it had not been for the early watering of the company's capital structure, depreciation and retirement deductions from income would presumably have retired this unclassified property years ago.

This, in our opinion, based on evidence submitted in regard to early over-capitalization, applies to practically all of the unclassified fixed capital of the system. The $34,826,786.77 of unclassified fixed capital on the books of the New Amsterdam Gas Co., and the $73,177,180.74 on the books of the New York Edison Co., both patently reflect such early over-capitalization and unquestionably represent, if anything, obsolete or junk value equipment carried on the books at full value.

A thorough combing of the books of the entire system in terms of the service value of the property by an aggressive commission should free the companies and consumers of this unwarranted burden.

Much Evidence Supports This Conclusion

The evidence presented by corporation officials and other experts contains constant reference to the present corporation policy of valuing plants and equipment above its service worth.

Commissioner Lunn referred to an instance where the United Traction Company put a reproduction cost new on two old cars put together and painted up with their ends cut off to form a center entrance car (p. 1027). Commissioner Van Namee in the Plattsburgh Gas & Electric Company case in 1906 allowed $171,333.65 for a steam generating plant that had not been used for two or three years (p. 1188).

Mr. H. E. Riggs, Civil Engineer of the University of Michigan,

referred to an instance in which a Buffalo engineer placed a $1,000,000 valuation on generator units in a power house, which he termed a reasonable estimation of what it would cost to build that kind of a unit. But Riggs valued the same three units at $22,500 "because in the first place they were out of use and scrapped, and in the second place, no one had built that kind of unit for 20 years" (p. 4005).

Mr. John Bauer, valuation expert and formerly attached to the New York Public Service Commission, pointed out that the 1917 book values of the New York City utilities were likely to include all kinds of over-capitalization on obsolescent property. He said:

> "Take a generating unit that was established way back in 1910. It may be physically just as good as new but as an operating proposition it is dead, it is obsolete, because it has no real value in any sense whatsoever" (p. 4350).

He pointed to the present company theory that property should be kept on the books at full value until actually retired although hopelessly obsolete, and remarked that under such a theory "the longer a company can keep a lot of junk, equipment of any sort or any obselete property, the more it will have for valuation purposes." He continued:

> "I can go over this city and point out what I think are vast quantities of generating plants, all kinds of equipment that exist for reserve purposes only, I think for purposes of valuation, that have no real use for public service" (p. 4393).

Now, this thing that Mr. Bauer points out from first hand experience is practically admitted to be the policy of the corporations by Vice President Lyle H. Olsen of the American Appraisal Company, who should certainly know, and by President Sloan of the New York Edison Company, who admitted that the system companies carry old property on the books at full book cost undiminished by obsolescense or depreciation until actually retired (pp. 5590–91).

Without going further we feel that this explains the nature of the over-valuation in the properties of the electric and gas companies which serve New York City. Unless the Public Service Commission has power and inclination to order a company to write off the obsolescence in its property as it develops, the present system gives the company absolute control of the situation.

By keeping obsolete equipment on the books at full book cost and at the same time capitalizing increasing retirement and contingency reserves which should be steadily retiring or taking care of obsolescence in such property, a company can not only make good early over-capitalization but can continue its process of inflation to an unlimited extent.

Enormous Reserves of Consolidated Gas

On December 31, 1928, the combined reserves and surplus accounts of the Consolidated Gas System totaled $277,905,455.79,

according to the evidence submitted by Vice President Nickerson (See Additional Information, pp. 113–14). It seems to us significant that this total so closely approximated the $286,767,072 by which, according to President Cortelyou, the actual investment on their books exceeded the capitalization.

This surplus and reserve total represents about 37 per cent of the total capitalization and about 27 per cent of the so-called investment. A 7 per cent return on this sum would mean about $19,400,000 added to the gas and electric bills of New York City. The total was distributed among the affiliated companies as follows:

RESERVES AND SURPLUS, CONSOLIDATED GAS SYSTEM

	Contingency Reserve	Total Reserves and Surplus
Consolidated Gas Co	$9,301,659 48	$56,712,913 32
Astoria Lt., Ht. & Pr	2,906,166 67	14,014,802 77
New Amsterdam Gas	2,972,162 48	*3,777,698 04
Central Union Gas	1,841,179 98	12,562,930 03
Northern Union Gas	394,997 28	1,815,844 25
Standard Gas light	2,579,492 13	4,837,313 83
N. Y. & Queens Gas	36,149 66	259,697 41
National Coal & Coke	.....	37,294 55
New York Edison	23,805,570 40	93,251,133 03
Brooklyn Edison	8,627,785 14	35,251,637 61
N. Y. & Queens Lt. & Pr	811,491 32	20,097,761 97
Yonkers El. Lt. & Pr	229,019 59	3,587,033 19
Brush Elec. Ill	.....	197,097 82
Consol. Tel. & El. Subw	1,001,571 68	4,433,257 99
The United El. Lt. & Pr	2,733,165 60	21,950,469 38
Edison Lt. & Pr. Instln	.....	20,503 22
Westchester Lighting	2,260,224 98	9,867,154 34
Northern Westchester Lighting	72,443 04	506,615 25
Peekskill Litg. & R. R	27,656 20	569,546 15
Bronx Gas & Electric	.....	1,752,171 15
Minor companies	.....	*40,023 43
	$59,600,735 63	$277,907,455 79

Consolidated Gas Stockholders Get Generous Profits

The evidence before the Commission shows clearly that rates which the company has gone to great expense to prove confiscatory have been providing profits which appear more than satisfactory to the outsider.

For the Consolidated Gas System as a whole gross profits before fixed charges increased from $10,222,603 in 1915 to $54,035,149 in 1927—a gain of more than 425 per cent. Including the Brooklyn Edison Company the 1928 profits totaled $73,127,622.

After deducting interest the profits available for the stockholders increased from $8,502,858 in 1915 to $42,273,779 in 1927—a gain of about 400 per cent. Including the Brooklyn Edison Company the 1928 profit for the stockholders was $59,592,552.

Even more striking is the increase in the rate of return per

* Deficit.

$100 of common stock. On the original $100 shares the profit in 1915 amounted to $8.52. On the four shares into which these original shares were split the 1928 profit amounted to $18.08.

The dividend rate increased from 6¾ per cent in 1915 to an annual rate of 12 per cent at the end of 1928. In October 1929 the rate was again increased to the equivalent of 16 per cent on the original $100 shares.

The following table shows the profits and dividends of the Consolidated Gas System in recent years:

CONSOLIDATED GAS COMPANY'S PROFITS AND DIVIDENDS—1915-1918.

Year	Gross Profits	Net for Stock	Dividends	Profit rate per $100 com.	Rate of Dividend.
1915.....	$10,222,603	$8,502,858	$6,737,614	$8 52	6¾%
1915.....	10,147,620	8,654,464	6,987,155	8 67	7 %
1917.....	9,234,238	7,741,077	6,987,155	7 70	7 %
1918.....	7,235,773	5,702,401	6,994,794	5 71	7 %
1919.....	5,595,877	4,122,440	7,021,796	4 11	7 %
1920.....	3,533,734	1,308,677	7,000,000	1 31	7 %
1921.....	1,251,046	2,979,637	7,000,000	....	7 %
1922.....	31,827,629	21,872,798	8,562,600	16 13	7½%
1923.....	35,808,771	30,510,587	15,439,751	18 12	10 %
1924.....	35,496,689	33,050,744	18,976,094	17 50	10 %
1925.....	41,754,623	30,898,906	19,100,920	16 30	10 %
1926.....	47,860,883	35,666,893	19,094,556	18 86	10 %
1927.....	54,035,149	42,273,799	24,992,201	17 58	10 %
1928.....	73,127,622	59,592,552	36,576,852	18 08	12 %

Early Story of Over-Capitalization

Out of the controversy and Courts opinions dealing with the early capitalization of the Consolidated Gas System, we find certain facts unrefuted:

(1) That the original capitalization of the Consolidated Gas 1884 merger was based on the market value of the securities which had been artificially raised in a period when the companies had formed a pool to impose an exorbitant rate in the City, and that company appraisers were set the task of finding value to justify this capitalization.

(2) That a law had been enacted in 1884 specificially intended to render such a capitalization, including a $7,781,000 franchise value, legal, and that the franchise value was based on expected dividends.

(3) That both the 1886 Committee and the Stevens Committee of 1905, with the Honorable Charles E. Hughes as counsel believed that this early combination was over-capitalized to the extent of at least $20,000,000.

(4) That the Stevens Committee and its counsel Mr. Hughes believed that the other gas companies coming into the combine

[1] Company has split stock 2 for 1 twice, once in 1922 and once in 1928, so that each no par share now represents about $25 par.
[2] Company has 40 year unbroken dividend record.

added more than $40,000,000 to the over capitalization, the New Amsterdam Company, now loaded with $34,826,786 of unclassified fixed capital, adding the largest bucket of water.

(5) That the Stevens Committee believed on the basis of the evidence that the original New York Edison merger, with all valueless property, franchises and patents squeezed out, added from $50,000,000 to $60,000,000 to the over-capitalization and perhaps more. Its unclassified fixed capital totals $73,177,181.

(6) That the Westchester Lighting and other Electrical companies were believed by this Committee to have added to the over-capitalization.

From these facts, placed before us at great length, we are forced to the conclusion that the builders of the Consolidated Gas System were responsible for early over-capitalization to the extent of approximately $150,000,000, and that the effects of this are still on the books in the form of capitalized obsolete equipment duplicated by large reserves. We believe that a study of the capitalization of this combine on the basis of capacity to produce and distribute gas and electricity would fully substantiate the existence of at least that amount of over-capitalization.

Brooklyn Union Provides Another Example

An analysis of the history of the Brooklyn Union Gas Company, presented in evidence before your Commission, suggests the method by which the water in the capitalization not only of this but of the other utilities of the City may actually have been concealed.

The Brooklyn Union Gas Company was formed in 1895 by the consolidation of companies having a combined capitalization of $13,800,000. The entire value of the properties was covered by the issue of $15,000,000 in bonds. However, $15,000,000 of stock was issued representing no value whatsoever. Prior to 1906, $11,-500,000 was paid in dividends on this valueless stock and down to 1919 the total dividends amounted to $26,303,820.

The significant fact, however, in our opinion was the development of a big amortization reserve which prior to the present Public Service Commission was always deducted from the fixed capital account, but which the present Commission apparently allowed to be transformed into a contingency reserve and capitalized.

In 1908 the first Public Service Commission accepted the book value of the company at its face value and for the following eight years allowed the company to charge 15c per thousand cubic feet to depreciation.

By 1920, the excess of this depreciation charge over and above actual retirement, amounted to $13,437,492.96. Down to the year 1920, this amount appeared as accrued amortization and was deducted by the Commission from book cost to get the figure representing actual fixed capital.

Then came the present Public Service Commission and this sum

became a contingency reserve, allowed to be included in fixed capital, and claimed by the company as a part of surplus. Thus the company has been permitted to make good the original water in its capital at the expense of consumers.

But it is an open question whether all of this represents real value. For the original property installed prior to 1909 was in that year carried on the books at $36,017,365 while in 1920 it was still on the books at $34,860,460, a decrease of only $1,156,365. This is in accord with the theory, already referred to in connection with Consolidated Gas, which keeps property on the books at full value until actually withdrawn. Presumably in 1920 the $13,437,493 of accrued amortization actually represented the obsolescence in the value of the old property and should have been deducted. The present capitalization of Brooklyn Union Gas undoubtedly is supported in part by such carrying of obsolete property in its books at full cost (pp. 1777–1794).

There is every reason to believe that this is typical of what went in to conceal the over-capitalization present in other utilities in the City. The transformation of accrued amortization from a deduction to actual capital value is one of the means by which the companies have been able to cover up.

Upstate Mergers Producing Similar Over-Capitalization

We have before us evidence that recent upstate mergers have inflated the capitalization of the properties by approximately $145,000,000. This represents the excess of the securities issued in exchange over the book values of the equities acquired. It includes $52,957,448 in connection with the Buffalo, Niagara & Eastern, $31,598,819 in connection with the Mohawk Hudson, both belonging to the Niagara Hudson combine of which Mr. Floyd Carlisle is Chairman, $43,000,000 in connection with the Mohawk Valley Power and $17,590,202 in connection with the Rochester Central Group, both the latter now included in the Associated Gas & Electric Company.

Mr. Carlisle in his testimony dealth at length with this question and indicated clearly, that by a process of reappraisal of the properties on the cost of reproduction theory, they intended to put value behind the excess at which the stocks of the subsidiary companies were carried to the books of the merger.

He said that they would have used this reappraisal figure if they had had it ready. He said they had it for the Buffalo, Niagara & Eastern "without capitalizing the rights on the Niagara River," and that in this instance it exceeded the book value of its stock by more than $80,000,000 (p. 3758). He referred to the early requirement by the Public Service Commission that the Mohawk Hudson Company set up in its books values no greater than the book values of the constituent companies and noted the later revocation of this order. On the new basis he anticipates no difficulty in bringing the value of this group to the capitalization on the books of the new combine (p. 3759). He says:

> "Since the Federal Courts have adopted rules for rate making, no one has considered the book values of the stocks of operating companies as a measure of determining their rates, or as a measure of their values" (p. 3760). "We intend to file with the Public Service Commission, and make as a matter of record for the consumers of the company, the exact values as of, we will say, January 1, 1930, which will be available for rate cases and for any purposes" (p. 3761).

Mr. Carlisle asserts that there would have been no holding companies in the United States of the magnitude to which they have grown if they could only have bought the stocks of the operating companies at their book values (p. 3756). He suggests that in cases of purchasers or mergers or consolidations the values set up be the actual values, the sound reproduction values (p. 3772).

He also made the following significant statement:

> "I think the most unfortunate feature of the operation of regulation in this country is that the book values of the operating companies are totally unrelated to the legal values under which these companies operate, sell electricity and do their business. *In other words, you have got a value on your books that has nothing to do with the income that you can earn.*"

The last sentence affords a clear insight into the whole outlook of the men who are guiding the utilities of the State and the Nation.

This over-valuation, which in its various forms is defeating efforts at public utility regulation, is still an attempt to determine capitalization, even in a regulated industry, on the basis of profits.

A New Form of Over-Capitalization to Conceal Excessive Returns

By way of summarizing our position we may point out that in early days in order to conceal excessive returns watered stock was issued, capitalizing expected profits, which made the rate of return appear low, and thus disarmed public criticism.

As a result of the passage of the Public Service Commission Law, which placed the securities issued by operating companies under public control, this cruder form of over-capitalization was abandoned with respect to the operating companies, although it is still being resorted to by the uncontrolled holding companies.

The modern substitute, however, for stock watering now takes the form of grossly inflated valuations which companies place upon their physical and intangible property, and which they have been able to validate to a surprising degree by appeals to the Public Service Commissions, and if necessary, by further appeals to the Courts.

The curbing of this insistence on over-capitalization has always been the fundamental problem of regulation, as shown by all investigations. Concealed in the valuation problem it remains

the fundamental issue with which the present Commission on Revision of the Law must deal. The evils which we are about to discuss spring from this fundamental evil.

Section 4. Electric Rates Reveal Lack of Effective Regulation

The electric rate situation throughout New York State affords concrete evidence of the extent to which the pressure of the utilities has brought about the practical abandonment of consumers to such charges as the companies saw fit to impose. The rate levels in different sections of the state show a complete lack of uniformity which can be explained only in part by legitimate differences in production costs. Apparently the Public Service Commission has been driven by circumstances to sanction rates which have no possible justification on any economically sound basis of control.

The evidence shows that the establishment of electric rates on an economically sound basis in New York City would furnish household current for a maximum rate of 5c a kilowatt hour. Yet President Sloan of New York Edison Company testified that the lowest rate for household current in the city is 7c a kilowatt hour and that this rate has been maintained unchanged by the New York Edison and United Electric Light & Power companies for 13 years. Notwithstanding the greatly reduced cost of supplying energy the people of Manhattan have not had their rates reduced since 1917, and the Public Service Commission has initiated no move in that direction.

A similar condition applies in nearly all sections of the state. This means that regulation has failed to make available to the citizens of the state electrical energy at rates which would encourage its wide use to relieve household drudgery. The evidence shows that the average rate for small consumers throughout the state in 1928 was 8.03c per kilowatt hour compared with a national average for the same type of consumer of 6.8c (p. 5719).

After 20 years of regulation in New York State, and more expensive regulation than in any other state, the small consumer is paying 18 per cent more than the average for the country for his electric current and 20 per cent more than the average for the country outside New York.

Electric rates for small domestic consumers in New York State actually averaged about four times those prevailing for small consumers across the border in Ontario where the electrical utility business is in the hands of a league of municipalities.

In spite of these patent facts the evidence shows that the New York Public Service Commission has shown practically no initiative in the direction of securing lower rates for domestic consumers of electricity. This means that the consumer's interest has been neglected in one of the most important fields affected by regulations, that is, the making available to the homes of the commonwealth of the most modern form of labor saving energy.

Regulation of privately operated public services is an alternative to public ownership and operation. To prove its efficacy it must assure the community as a whole the maximum possible service for that proportion of the community's income which can be devoted to these utilities.

Regulation means alert public control. If the regulatory machinery does not provide such control, the result to the consumer is relatively limited service for his money. Where the consumer receives limited service from the utilities for the money which he pays, it means that the utilities are not being operated in the public interest.

As already suggested, all must recognize that the alternative to such ineffective regulation is some form of public ownership and operation.

New York City Consumers Should Pay No More Than 5c.

We have before us a large body of evidence presented by Community Councils of the City of New York showing that with effective regulation small domestic consumers of electricity in New York City should pay no more than 5c a kilowatt hour for their current.

This testimony was not contradicted by the companies and was substantiated in the course of the extensive testimony of Percival R. Moses, engineer and financier.

Referring to the rate of 4c a kilowatt hour or less charged to buildings which submeter electricity to their tenants, Mr. Moses said emphatically:

> "I personally can see no justification for the differential why our tenants should pay, say 7c and we should pay, say 4c. If there is a profit to us in buying it and reselling it, the company should be able to resell it direct to them, at 4c, plus a very minute fraction" (p. 2439).

Mr. Moses asserted that a flat rate of 5c a kilowatt hour, referring especially to the New York Edison Company (p. 2446). He expressed the feeling that the lowering of the retail rate would increase consumption to such a degree as to make up for any loss the company might suffer (p. 2453). He contended that the middleman functions today only because of the unfair rate structure "which has grown up on the basis of charging what the traffic will bear" (p. 2440). He asserted that rates should be based on the cost of service to each class of consumers (p. 2444).

Community Councils Offered Cost Studies

Evidence presented by Community Councils of the City of New York included studies of the cost of serving small domestic consumers in New York City. These studies were based on the detailed figures for 1927 reported to the Public Service Commission by the New York Edison and Brooklyn Edison companies and published in the annual report of the Commission. They indicate

that present costs, including allowance for retirement reserves and return on capital, warrant a maximum rate of not more than 5c a kilowatt hour to domestic consumers (pp. 2877–2913).

They also suggest that with the increased consumption of electricity by small users, which would inevitably follow real rate reductions, domestic consumers in New York City could be served for an average of not more than 3½c a kilowatt hour.

The following table shows, for the New York Edison and Brooklyn Edison Companies, the cost of serving a small domestic consumer using 50 kilowatt hours of current in a single month. This table might represent his itemized bill. It is based on far more detailed tables included in the Community Councils' presentation.

COST OF SERVING DOMESTIC CONSUMER USING 50 KILOWATT HOURS IN A SINGLE MONTH—NEW YORK AND BROOKLYN EDISON

(Based on Public Service Commission 1927 Report.)*

Item	New York Edison Co.	Brooklyn Edison Co.
Production	$0.381	$0.353
Transmission	0.138	0.022
Distribution	0.265	0.182
Overhead, including administration, general office, retirement, etc.	0.345	0.438
6 per cent on fixed capital	0.537	0.573
Taxes	0.177	0.285
Customer costs, which do not vary with consumption, allocated on a per customer per month basis	0.736	0.513
Total bill for 50 kilowatt hours in a single month.	$2.579	$2.366
Per kilowatt hour	5.2¢	4.7¢

* (Pp. 2890 and 2902.)

These figures, and the more elaborate studies on which they were based, were offered, not as the final word on costs in New York City, but as best possible approximation based on the figures available under the Public Service Commission's uniform system of accounting. This uniform system of accounts was criticized as failing to reveal all the items necessary to a complete allocation of costs as between the various classes of consumers.

The tables are offered more as an indication of the method which should have been followed by a public service commission interested in the active regulation of electric rates in the interest of giving the small consumer the great benefits which may be derived from the maximum use of electrical energy in the home. The Councils said:

> "At present small consumers are paying rates which include some of the costs, particularly the overheads, which should be shared by the large scale consumers who get their current at competitive rather than monopolistic prices. A proper analysis of the costs of the various industries as they affect different classes of consumers would have enabled the commission to avoid the error of falling in with the timorous policy of the industries themselves" (p. 2876).

The Councils also suggested that proper use of such analysis, including comparisons with other companies, should eventually lead to reductions in various cost items where these appear out of line with the best practice (p. 2880). They also point out that their tables do not take into account the savings due to the absorption of Brooklyn Edison by the Consolidated Gas system in 1928.

Evidence That Consumers Have Been Abandoned

With these facts before us, evidence that the Public Service Commission has in recent years done next to nothing in the way of studying the rate structure, that it has taken practically no initiative in the direction of reforming and reducing electrical rates, that over long periods large bodies of consumers have experienced no reductions in rates which range for above the maximum justified by the cost of service, and that as a consequence the great social gains to be derived from electrical energy are not generally accruing to the homes of New York, is conclusive evidence of the condition to which the corporations have reduced regulation and of the practical abandonment of the consumers of New York to the unchecked will of the utility companies.

President Sloan of the Consolidated Gas electrical properties, which serve practically the whole of New York City, started his testimony by claiming very considerable reductions in electrical rates since 1914. He asserted that rate reductions by the system electric companies since 1924 have meant an annual saving of approximately $11,000,000 to customers.

When pressed for figures as to year by year rates charged to small domestic consumers, Mr. Sloan was forced to admit that $4,500,000 of this saving was due to the elimination of the coal surcharge from the bills of small consumers and that in the case of the New York Edison and United Electric Light & Power Companies, serving all of Manhattan, the rate had been maintained at 7c per kilowatt hour without reduction for 13 years (pp. 5359 and 5440–1). His figures also show that another considerable proportion of the saving was accounted for by reductions from rates as high as 11c a kilowatt hour in the case of the New York & Queens Company and 12c kilowatt hour for the Yonkers Company (p. 5345).

We feel that the single fact that users of electricity on the island of Manhattan have been given no rate reduction since 1917 is peculiarly a significant indication of the extent to which consumers of New York City have been abandoned so far as regulation is concerned. The Public Service Commission has done nothing about it, has initiated no proceeding against the New York Edison Company looking to a reduction in its rates to domestic consumers.

The City of New York initiated such a case in 1923 which is still pending. According to Mr. Sloan's testimony the company has already spent more than $5,000,000 fighting this case and will conceivably take it into the Courts if the Commission's decision is adverse to the Company (pp. 5442, 5443).

The electric rates prevailing throughout New York City are rates fixed by the companies, not by the Public Service Commission. This is true of electric rates in the suburban regions of Westchester county and Long Island. In fact it is a generalization which applies to the electric rates throughout practically the entire state. And throughout the state, with a few possible exceptions, the small domestic consumer is paying far more than his share of the cost of providing electrical service.

Evidence of Widespread Profiteering by Electric Companies

We have before us an exhibit offered by Chairman Prendergast of the Public Service Commission showing that many companies are deriving excessive profits from electrical rates (Exhibit 125 B). This exhibit was originally prepared by the Commission's accounting division to give the Commission a basis for deciding whether to approach any companies with the suggestion that they reduce rates. Its preparation was ordered when it was known that the present investigation was pending. The rates of return are computed on the fixed capital reported by the companies at the end of 1928, plus a generous allowance for working capital and with no depreciation deducted.

In very brief, this exhibit showed that in the year 1928 56 out of 75 electrical properties, or roughly 75% of those subject to the jurisdiction of the Public Service Commission, made a profit of more than 8% on the capital so computed. Electrical properties making more than 9% numbered 46 or more than 60% of all the companies, There were 34 properties out of the 75 with profits of more than 10% and 30 of them showed a return of more than 12%. In the group making more than 15% we find 15 companies while electrical properties with 1928 profits exceeding 20% numbered 10.

Thus the evidence before use shows that under the present system of regulation electrical rates in effect in 1928 were returning to majority of the companies a profit of more than 9%, with profits running up to 31.66% in the case of the Corinth Electric Light & Power Company.

In the Consolidated Gas group of electrical properties serving New York City, the evidence shows all the companies except New York Edison with a 1928 profit of more than 8% on the capital computed according to the instructions of the Public Service Commission. The New York Edison Company, which was very greatly over capitalized at the start, shows a 1928 profit of 7.77%. Especially high profits shown in this group were the Bronx Gas & Electric Co., 25.73%; the New York & Queens Electric Light and Power Co., 13.28%; the Westchester Lighting Co., 13.30%, and the Yonkers Electric Light & Power Co., 10.08%.

Among the E. L. Phillips companies we note that the Long Island Lighting Co. showed a profit of 16.83% and that the Queensborough Gas & Electric Co. a profit of 12.16% in 1928. Representatives of the Long Island Lighting Company assert that the figures of the Public Service Commission are in error, and that they grossly misrepresent the rate of return on actual investments

which the Company has been earning. But they were the figures reported to the Public Service Commission by the company itself and were the only figures available to the Commission in determining the rate of return.

Attitude of Commission Shows Corporations Are Unregulated

The evidence before us reveals the extraordinary complacence with which the Public Service Commission viewed a rate situation which produced such profits. Apparently with the constant threat of dragging rate cases into the courts on the valuation question the corporations had practically paralyzed the Commission's initiative and emasculated regulation.

Chairman Prendergast, apparently reflecting the views of other members of the Commission, testified that the Commission had so carefully scrutinized rates throughout the entire State that with respect to the vast majority of rates in effect they were fair and reasonable (p. 352).

Later, the same witness made the stronger statement:

> "I believe we have very closely approximated rates that would be determined by the most exact methods that could be employed" (p. 539).

He further asserted that there was no necessity for extending to municipalities the legal or financial ability to press the interests of consumers in rate matters because the interests of consumers would be adequately protected by the Commission itself.

He declared that the Commission itself would furnish the driving power for rate control. But he indicated that the Commission's method of protecting the consumer leaned toward negotiation and cooperation between the Commission and the utilities rather than the initiation of rate proceedings (p. 529). He expressed the view that the companies aim to please consumers and cooperate with the Commission (p. 629).

This attitude means the complete neglect of consumers so far as the protection of regulation is concerned. In a later section of the report we will consider the evidence showing the lack of initiative on the part of the New York Public Service Commission, also the manner in which it actively discouraged efforts of groups of consumers to protect their own interests.

In this section of our report we wish to adhere to such conclusions in regard to regulation as are drawn from evidence on electrical rates.

Competition of Municipal Plants Produces Low Rates

We are impressed with the fact that while regulation has failed to produce low electric rates in this state, the proximity of municipal plants or of public operation on a larger scale apparently had that effect. There is evidence before us showing that states in which there has been a considerable development of municipal operation show lower average rates than do states in which there

has been no such development. And the verge of rates in these states appears lower even with the municipal plants excluded.

There are not enough municipal plants in New York State to affect greatly the general rate level, but the depression area in rates surrounding Jamestown is significant. Jamestown has the largest municipal plant in the state. In 1928 the rates of the private company in the immediately surrounding area were lower than anywhere else in the territory served by the whole Niagara-Hudson system, namely, 4.5c per kilowatt hour. Not only were they so low around Jamestown, but they were lower next to the municipal plant than they were in or around Buffalo, which is much nearer the source of generation, and where they should consequently be lower (pp. 5721-2).

The few municipal plants in New York State charge less than cities and towns of their same size in this State under private ownership.

This evidence was compiled from the 1928 rate sheets of the New York Public Service Commission by the City Club of New York and in part by the Public Committee on Power in New York.

The rates for the similar groupings in this State are: 33 municipal plants charge for 40 kilowatt hours per month $3,059 or 7.467c per kilowatt hour. 35 cities under 25,000 having private service charge $3,621 or 9.053c per kilowatt hour.

The private plants in cities between 1,000 and 25,000 population in this State thus charge 18.5% more for their service to the average user of domestic power than do the municipal plants in this State which are in the same size grouping.

An interconnected municipal system may be expected to exert a greater pressure toward low rates than isolated municipal plants can do, for, like an interconnected private system it can affect economies of service. This expectation is borne out by the relatively low rates charged in some of the New York Cities close to the influence of the Hydro-Electric Commission of Ontario.

These relatively lower rates were obviously not due to closeness to the source of generation, for we have seen that still further away than these cities, around Jamestown, the rate was even less. The difference between the generation cost of hydro-electric power and that of a modern efficient steam plant is only a few mills. A more realistic explanation for the relative lowness of these rates lies in the fact that they are close to Ontario, and the cities charging them experience the competition of the example which an interconnected municipal system offers.

At this point we do not intend to go further into the question of municipal rates charged outside of the State. It is sufficient to note that the conclusion appears inevitable that where the corporations have succeeded in defeating effective regulation by means of unjust valuations, municipal competition may provide consumers protection and a promise of lower rates on the part of the private producers and electricity.

Section 5. The Coal Surcharge Imposition

Closely connected with the abandonment of consumers in New York City in the matter of electrical rates is the coal surcharge imposition by which users of electricity were mulcted of $20,000,000 by the electrical units of the Consolidated Gas Company system in the years 1921 to 1928, inclusive.

This total appears in data submitted by President Matthew S. Sloan of the New York Edison Company along with other figures in which he sought to becloud the issue. But reports on file with the Public Service Commission, including a statement which he himself submitted in 1928, prove the explanations which he offered in his testimony before the Commission to have been erroneous.

We feel that the evidence showing that the Public Service Commission failed to protect the interest of New York consumers of electricity in this matter and made no effort to expose a deceit practiced against the public is further demonstration of how the utilities have been able to defeat regulation.

History of the Surcharge

The story of the coal surcharge is best told in a memorandum which this Commission has secured from the files of the Public Service Commission. It was submitted by the Brooklyn Edison Company over the signature of its President who at that time was Mr. Sloan himself. It is entitled Memorandum For The Public Service Commission For the First District Concerning Coal Surcharges and is dated July 10, 1928. Mr. Sloan said in part:

> "The coal surcharge, as a method for adjusting electric charges to consumers in accordance with monthly increases and decreases in the cost of coal to the utility company, was first deemed to be required as a part of the rate schedule of the Brooklyn Edison Company, Inc., in 1917, *by reason of the abnormal increases in the price of coal which resulted from the World War.* * * *
>
> "Previous to 1917 the cost of coal, although subject with other commodities to normal variations may be deemed to have been sufficiently constant to properly figure with the other comparitively constant elements of cost entering into a determination of a stationary base rate. * * * By the year 1917 when coal surcharge was inaugurated the cost of coal had come to represent 20% of gross revenue as compared with 8% just previously (1915). As a matter of fact the cost to the Company for coal gradually increased from an average of $2.76 per ton in 1915, to an average of $9.94 in 1920 or over three times as much. At one time, namely in June, 1920, the cost of coal to the company mounted as high as $15.22 per ton. In 1920 the proportion of coal cost to gross revenue amounted to 32% and the proportion of coal cost to operating expenses was 48% as compared to 22% in 1915. * * *
>
> "In an attempt to compensate for these continuing increases,

the coal surcharge was made applicable to all wholesale contracts on January 15, 1918, and in the following October it was extended to apply to retail power contracts and the rate was made 5/100 of a cent instead of 35/1000 of a cent per kilowatt for each change of 30 cents in the price per ton of coal. This however was reduced in November, 1919, to 35/1000 of a cent for all high tension and low tension current used for power purposes.

"The year 1920, however, with the close of the War and the development of foreign demand, brought about a very substantial increase in the cost of coal. * * * This necessitated an increase which the Company made in December, 1920, in its coal surcharge to 5/100 of a cent to be applicable to all low tension service, with no change however made as to high tension service, which remained at 35/1000 of a cent.

"When the foreign demand for coal returned to normal due to the reopening of mines in foreign countries, the American prices were reduced and the quality of coal delivered materially improved. Accordingly, the company, in order to compensate for the better quality, reduced its coal surcharge in April, 1922, about 20%, or from .0005 to .0004 for each 10% of increase or decrease from the normal price of $3.00 per ton for coal for low tension consumers and from .00035 to .0003 for high tension consumers."

This last adjustment remained in effect until the coal surcharge was removed so far as low tension consumers were concerned as of October 1, 1928. There is considerably more discussion in President Sloan's memorandum explaining why when reductions in rate were possible the company chose to lower the base rate rather than remove the surcharge.

In the course of this discussion it is reiterated over and over that the cost of coal is the variable and uncontrollable element. Thus he says:

"With the cost of coal continuing to be an element of uncertainty beyond any possibility of control or calculation, it was decided that the coal surcharge was a necessity.

"There is some reason to believe that the cost of coal never will return to the lower prices current before the war. There is every reason to believe it never will become so constant and free from uncertainty as to be safely included with other more constant elements of cost used for determining a base rate.

"It is just as impossible now, or practically so, as it was when the surcharge went into effect, for the Company to foretell or estimate the changes in coal costs within a definite period, even a short one. Under the surcharge clause the increase and decrease in the rates to the consumers definitely follow the increase or decrease in prices paid for coal by the Company, and so from the standpoint of substantial justice, no injury under such rates can be done to consumers."

We have quoted at length from this memorandum because to the deception practiced upon the public in connection with the coal surcharge Mr. Sloan has added an attempt to deceive the Commission on Revision.

Mr. Sloan testified before the Commission that the excess collected through the coal surcharge over the actual increase in the cost of coal required to produce electricity was collected to cover increases in other operating expenses including labor and materials. He testified further that this was the understanding with the Public Service Commission in connection with the imposition of the coal surcharge. He contended further in his testimony that any consumer, finding an addition to his bill designated a coal surcharge could have learned that this surcharge was meant to cover a lot of other items and was simply regulated by the price of coal because the price of coal tended to fluctuate along with the other items.

We have found no record of any such understanding in the files of the Public Service Commission. His supplemental citation from certain rulings of the Public Service Commission with regard to the filing of changes in charges prove nothing of the kind.

In citing these rulings Mr. Sloan gives the impression that he is citing actual orders authorizing the coal surcharge when as a matter of fact he was apparently unable to cite such orders. His citation from 1919 order of the Commission on the filing of schedules reads in part:

"Section 11A. In case any schedule filed in accordance with the provisions hereof contain a rider or clause providing that the corporation by which the said schedule was filed shall increase or decrease the price per unit to be charged for service furnished or to be furnished by it because of any increase or decrease in the cost of the said corporation of any coal or other commodity by it used in the production and furnishing of the said service, the corporation filing the said schedule shall, provided any increase or decrease in the price to be charged is to be made, at least three (3) days before sending out bills for the collection of the amounts due it for service furnished filed with the Commission and post and keep open to public inspection in its office and in each place where applications for the service furnished by it are received an original sheet or revised sheet signed by an officer of the said corporation showing the cost to it of the coal and other commodity upon which such increase or decrease is based used in the production and furnishing of the service for which bills are to be rendered and setting forth in detail the extent to which the rate or charges to be made or demanded by it are to be increased or decreased and the basis upon which such increase or decrease is to be made."

This is clearly a general filing order to cover eventualities. It envisages the possibility of a surcharge covering increase in the cost of other commodities, similar to the one then in effect covering

the abnormal increase in the cost of coal. That the occasion did not arise for the fixing of a surcharge covering other commodities is proved by the quotations which we have already given from Mr. Sloan's own memorandum. It will also be shown from quotations which we are about to make from a 1920 letter from Vice President Lieb of the New York Edison Company.

That it did not actually come to include surcharges covering such other commodities is also conclusively demonstrated by Mr. Sloan's own further citation of a subsequent 1922 filing order on the same subject, in which the words: "or other commodity" are noticeably lacking. His italicized quotation from the Commission order reads: "increasing or decreasing the rate per kilowatt hour for electricity in accordance with an increase or decrease in the cost of coal for the production of said electricity, etc."

The first filing order which he quotes was issued in February, 1919, prior to the imposition of the coal surcharge on domestic consumers, and at a time when the whole question of the trend of prices was still open. The second was issued in May, 1922, after the imposition of a domestic coal surcharge, when it was clear that circumstances would warrant its application as a coal surcharge only. Mr. Sloan's own memorandum from which we have just been quoting contains not a single reference to the coal surcharge being levied because of anything but the increased cost of coal. In fact that memorandum contains tabulation which prove conclusively that the other items of operating expenses did not fluctuate with the price of coal. While the cost of coal was rising from 22% of operating expenses in 1915 to 48% of operating expense in 1920, labor and other expenses fell from 78% of operating expenses to 52%. And the removal of the coal surcharge occurred soon after the proportion of coal costs to total operating expenses was restored to pre-war percentage. These are Mr. Sloan's own figures. A chart accompanying his memorandum shows them graphically.

In order to check the facts in this coal surcharge matter further the Commission has secured from the files of the Public Service Commission a letter from Vice President J. W. Lieb of the New York Edison Company, dated November 3rd, 1920, or just when the domestic coal surcharge was going into effect. In the course of this letter Mr. Lieb says:

> "We have endeavored to make it clear during our conferences that there is nothing in this adjustment which undertakes to return to the company any of the increased cost of labor during the intervening period, which now amounts to $1,500,000 annually, or in the cost of supplies and materials, or the increase in taxes, which is a very substantial sum. Nor have we added anything for the cost of new capital invested since 1916, nor any allowance for the still greater cost of the new capital that will be required during this and next year to extend our plants and to meet the service needs and to maintain the standards demanded by the city.

> "The printed records of the Public Service Commission confirm the reservation to which we have referred during our conferences, to the effect that in accepting the proposed reductions of 1916, taking effect January 1, 1917, the company then reserved the right to return to a maximum rate of 8 cents a kilowatt hour should the estimates then before the Commission upon the future cost of service fail to be realized. Notwithstanding the existence of this reservation no effort has been spared to continue through this entire period of rising prices without increasing our rates to the public. *Were it not for the abnormal increase in the cost of coal, largely sanctioned, if not established through agencies of the Federal Government, we believe that this objective would have been accomplished and no relief of this kind would have been necessary.* Even now, it will be appreciated that we are not attempting to change our price schedules but are merely adding an adjustment based upon the excess in the cost of coal, which will fall immediately and automatically with any reduction in the cost of coal at tidewater. Under this plan, as filed with the Commission, should the cost of coal return to $3.00 a ton there would be no increase in the schedules established by the Commission in 1916."

There is a full and careful statement of the purpose of the coal surcharge which directly contradicts the sworn testimony of President Sloan to the effect that the so called "Coal Surcharge" was in reality intended to be a flat rate covering the increased cost of labor and materials.

Sloan Figures Show Excess Collected From Consumers

The coal surcharge was adjusted to increases or decreases on the cost of coal per long ton F. O. B. New York harbor. But beginning with 1921, due to technical improvements, the amount of coal required to produce a kilowatt hour of electrical energy fell rapidly. Starting at 2.25 lbs. in 1916, the base year, and 2.21 lbs. in 1921, it fell to approximately 1.50 lbs. per kilowatt hour in 1928. Mr. Sloan's figures show that where the cost of fuel was 0.416¢ per kilowatt hour sold in 1916 and 1.059¢ per kilowatt hour sold in 1921, it had fallen back to 0.442¢ per kilowatt hour in 1928 which means that it was undoubtedly practically back at the 1916 figure by October, 1928, when the surcharge was removed from the bills of the domestic consumers.

During this entire period the consumer was being taxed with the surcharge just as if the consumption of coal per kilowatt hour were not steadily declining.

As a result in the 8 years 1921 to 1928, according to Mr. Sloan's figures, the actual cost of the fuel necessary to produce the current sold was $112,282,358.96. At the 1916 cost of 0.416¢ per kilowatt hour it would have cost $76,551,792.28 for the fuel necessary to produce the required amount of electricity. Consequently the actual excess in the cost of fuel for the 8 years over the 1916

basis was $35,730,566.68. But, according to Mr. Sloan's figures, the companies actually collected from consumers through the surcharge $55,701,491.31 or an excess of $19,970,924.63 over and above what the increased fuel cost warranted.

In the single year 1928 the companies collected a surcharge of $6,440,962.06 although the excess of the actual cost of fuel over the 1916 cost basis was only $861,721.82. The excess collection from consumers for that year alone amounted to $5,579,240.24. Mr. Sloan's figures showing excess of actual cost of fuel over 1916 cost basis, the revenue derived from the coal surcharge, and the excess collected, year by year, are:

EXCESS COLLECTED FROM CONSUMERS BY COAL SURCHARGE

(Figures submitted by Mr. Sloan)

Year	Excess of Actual Costs of of Fuel Over 1916 Cost Basis	Revenue from Coal Surcharge	Excess Collected by Coal Surcharge
1921	$9,564,797 38	$8,871,010 62	*$693,786 76
1922	7,329,413 77	7,018,153 77	*311,260 00
1923	7,137,429 76	8,759,916 95	1,622,487 19
1924	4,537,290 16	6,597,607 08	2,060,316 92
1925	2,408,217 96	5,743,514 48	3,335,296 52
1926	2,003,058 85	5,375,101 06	3,372,042 21
1927	1,888,636 98	6,895,225 29	5,006,588 31
1928	861,721 82	6,440,962 06	5,579,240 24
8 years	35,730,566 68	55,701,491 31	19,970,924 63

*Deficiency.

We have already referred to evidence before the Commission that from 1922 to 1928 the Consolidated Gas Company's profits averaged $17.51 and never fell below $16 on the outstanding shares representing each original $100 share of common stock. This return was about double that earned for stockholders in 1916. For the years 1921 to 1928 Brooklyn Edison Company averaged $14.08 on each $100 share.

The Neglect of the Public Service Commission in the Coal Surcharge Case

These facts, we believe, contribute another striking example of the way in which the utility corporations have undermined effective regulation. A Public Service Commission with the public viewpoint would have constantly checked the returns from this surcharge and would have discovered that changes in the industry were rendering its incidence unjust.

It is in evidence that Community Councils protested the surcharge four years before it was actually removed from the bills of domestic consumers.

The evidence before the commission shows that the deception which was increasingly a factor in the application of the coal surcharge appeared even more strikingly in connection with its removal from the bills of small consumers in October, 1928.

The elimination of the surcharge followed within a few months of sanctioning by the Public Service Commission of the absorption by the Consolidated Gas System of the Brooklyn Edison Company. This merger had been carried out in a manner which aroused public criticism. It had involved vague promises that savings would be passed on to the public.

On September 27, 1928, according to the evidence, full page advertisements appeared in practically all of the Metropolitan dailies announcing that $4,500,000 of these savings were to be made immediately available to the public through the elimination of the coal surcharge from the bills of all low tension consumers. This announcement was over the signature of President Matthew S. Sloan.

Actually the reduction in the coal surcharge was made as a result of a proceeding initiated by the Commission on complaint of at least 25 power consumers purchasing current from each of the electric companies serving New York City. This proceeding antidated by several months the merger of the properties and was based entirely upon the fact that the price of coal had been stabilized to such an extent that the surcharge was no longer warranted.

Mr. Sloan testified that the Public Service Commission approached the companies asking a reduction in the coal surcharge about 3 or 4 months prior to the Consolidated Gas Brooklyn Edison case. Several conferences were held (p. 5457).

It may be noted that Mr. Jeffe, negotiating directly with the Staten Island Edison Company, on behalf of the industrial power users, was able to get a more favorable deal in the matter of the coal surcharge than the Commission itself secured, and that later Chairman Prendergast, not knowing of this adjustment, suggested that the complaint be withdrawn as having no merit (p. 2386).

According to Mr. Sloan's testimony, the newspaper advertising which aimed to mislead the public cost about $25,000 and this was charged to operating expense.

Under existing practices the public itself pays for the various devices by which the utilities undermine the public interest.

Section 6. Deterioration in Gas Quality Means Cheating Consumers

The testimony before us contains extraordinary evidence showing the increasing extent to which gas companies are exploiting consumers by furnishing an inferior quality of gas.

In 1922 they secured the consent of the Public Service Commission to a change in standards which actually meant a reduction in the minmum required quality from the equivalent of 660 British Thermal Units to 537 of such units.

Since 1923 there has been a steady reduction in the gas actually sold toward that minimum, with an increasing number of days in each year in which one or more companies have violated the Commission's order by allowing the quality of gas sold to the consumers to fall below the 537 thermal unit minimum. The

daily tests made by the City of New York for all companies in the first eight months of 1929 show numerous and persistent violations of this rule with the average thermal unit test for the various months falling below the minimum set by the Commission.

To understand how the companies are actually exploiting the consumer, through the negligence of the Public Service Commission, it must be understood that the British Thermal Unit standard measures the heating power of a cubic foot of gas. As the heating power per cubic foot declines, consumers must buy an increasing quantity to secure the same amount of service. In the days before the change from the candlepower to the thermal unit standard, gas of not less than 22 candlepower, equivalent to 660 thermal units per cubic foot, sold for eighty cents a thousand. When the change was made, the Commission established $1.15 per thousand cubic feet as the price for gas of not less than 537 thermal units contents. To the average consumer this looked like an increase from $0.80 to $1.15 or about 44 per cent in his gas rate. Actually, however, $1.15 per thousand cubic feet or 537 thermal units gas meant $1.39 for the equivalent of 660 thermal unit gas. As the quality of gas sold by the company tended to decrease toward the minimum, the actual increase in rate to the consumers amounted to about 74 per cent instead of 44 per cent indicated by the rate. In other words, through the change in quality of gas the companies were able to secure a larger increase in rates to consumers than actually appeared in their public rate schedules.

How the Lower Gas Standard Was Adopted

The story of the adoption of the British Thermal Unit standard for gas shows that the companies were unwilling to make the change until they secured a Public Service Commission favorable to their determination to lower the standard.

In 1917, they were actually given permission to make the change but with the proviso that they sell 660 thermal unit gas for $0.80 with a proportionate reduction in the event of their giving below 660 thermal units. No company accepted the thermal unit standard on that basis.

When in 1927 the Legislature authorized the Public Service Commission to permit the corporations to adopt a thermal unit basis, the Commission, under the chairmanship of Mr. Straus, picked out three experts to report the thermal unit equivalent of 22 candlepower gas. After a series of tests, they reported that on the average, 22 candlepower gas showed a content of 659 thermal units.

In 1922 the new Public Service Commission began a series of hearings on the question of the change of standard and the evidence shows a distinct prejudice against the presentation of the public's side of the question.

Mr. William Birdsley, one of the three experts chosen by the Straus Commission in 1917 to work out the new gas standard, a man who for seventeen years had been in charge of the testing of gas for the City, was excluded as a witness on the ground that he did not have a college degree. The counsel for the Commission said that he did not intend to have this man contradict his witness, and Mr. Ransom, counsel for the companies, joined in objecting to Mr. Birdsley's testimony. The Public Service Commission excluded him from testifying (pp. 1796 to 1806).

The evidence before your Commission shows that from the beginning of the hearings on the gas standard, Community Councils of the City of New York took an active interest in the matter and were represented at the hearings. On February 17, 1922, the Public Service Commission excluded a Community Council resolution protesting against the deterioration in the quality of gas.

It was the conclusion of representatives of the Community Councils attending these hearings, as indicated by resolutions contained in their record, that the evidence presented was hand-picked "for the purpose of assisting the gas companies to supply an inferior quality of gas at an increased cost to the consumer and that the hearings are not for the purpose of protecting the consumers and assisting them to obtain the standard quality of gas they are now paying for" (p. 2606).

The Council records also show that in the course of these hearings, the Counsel for the gas companies objected to the people being represented by either the Coporation Counsel or indepedent counsel. He remarked that he didn't see why the City was interested or why the people should be represented.

Finally the evidence shows that, during the hearings on the change in the standard for gas, many housewives were present and protested. All these housewives, who were ready to testify to the poor quality of gas furnished, were ruled out by the Public Service Commission on the ground that they were not competent to testify on the quality of gas, and their statements ordered stricken from the record (pp. 1841-2).

City Tests Show Steady Deterioration in Gas Quality

We are impressed with the fact that permission to charge a higher rate, $1.15 a thousand, for a lower quality of gas, 537 thermal unit minimum, was granted by the Public Service Commission in an atmosphere of hostility to the consumer's viewpoint. It indicates the extent to which the corporations were coming to dominate the public body which was supposed to regulate them.

City tests made at 24 different stations every day except Sundays and holidays have been put in evidence before the Commission. These figures show graphically the increasing extent to which the gas consumers of the City have been cheated in terms of the quality of gas which they are purchasing.

In 1923 tests showed an average of 580 thermal unit gas furnished to consumers with only 15 out of more than 7,000 tests falling below the 537 thermal unit minimum set by the Commission. By 1928, however, the average for the year had fallen to the 537

thermal unit minimum and the number of violations of the minimum had increased to 128. These figures cover all the gas companies in the City.

The figures in evidence cover also the first eight months of 1929 and show the situation becoming rapidly worse for the consumer. In only one of the eight months was the average, at the 126 West 97th Street station for testing gas furnished by the Consolidated Gas Company, up to the 537 thermal unit minimum. On 145 out of the 200 days in which tests were made at this station during the eight months the gas was found to be below the 537 thermal unit minimum standard. In August there was not a single day in which the gas furnished consumers in the neighborhood of the station was up to the minimum standard.

The figures for the Williamsburgh branch of the Brooklyn Union Gas Company show an even more deplorable disregard for the consumer's rights. In no one of the eight months was the average up to the 537 thermal unit standard. In April, the average fell to 521 thermal units. In only 14 of the 200 tests made during the eight months was the quality of gas found to be up to the minimum of 537 thermal units.

The tests for the Brooklyn Borough Gas Company, taken at 2751 Coney Island Avenue, also showed the average below the minimum standard in every month. In March, the average fell to 508 thermal units for this company. Only a single test out of two hundred taken in the eight months showed the 537 thermal unit minimum standard. On April 24, 1929, the gas furnished by this company fell to 500 thermal units.

Similar figures are in evidence for the other gas companies. Tests at Flushing for the New York & Queens Gas Company show the average quality up to standard in three of the eight months. At Rockaway, the gas furnished by the Queens Borough Gas Company averaged up to standard in three of the eight months. At Staten Island, the New York & Richmond Gas Company's product tested up to the minimum standard in two out of the eight months.

The following table based on the evidence shows the maximum, minimum and average tests for the New York City gas companies for the years 1923–1929:

THERMAL UNIT CONTENT OF GAS FURNISHED EACH YEAR BY NEW YORK CITY GAS COMPANIES

Year	Maximum	Minimum	Average
1923	631	535	580
1924	590	523	570
1925	595	510	557
1926	581	523	546
1927	567	519	541
1928	545	522	537
1929 (8 mos.)	549	508	536

In only two of the eight months of 1929 was the average quality of gas furnished by the gas companies of New York City up to the 537 thermal unit standard established by the Public Service Commission in 1922.

These figures indicate the extent to which consumers of gas in New York City have been abandoned so far as regulation is concerned. Regulation has practically ceased to protect them. The Public Service Commission first permits a reduction in the minimum heating power of the gas which the companies are required to furnish and then tolerates an increasing violation of this standard.

The city makes these tests and pays for the gas which it uses accordingly. But the consumer has no such protection. The average household pays its $1.15 per thousand cubic feet whether it gets 580 thermal unit gas or only 537 thermal unit gas. But to get the same service this household must pay at least 8 per cent more for 537 thermal unit gas than it paid formerly for gas averaging 580 thermal units. In other words, through the connivance or neglect of the Public Service Commission, gas rates have been practically raised 8 per cent since 1923. This has been done without even requiring the filing of new schedules.

Similar Disregard for Consumer's Interest in Production of Two-Part Gas Rate

The gas consumers of New York have also been the victims of another piece of duplicity in connection with the attempts to introduce the four part form of gas rates sponsored by the American Gas Association. Here again we are impressed with the fact that the Public Service Commission practically connived with the companies in this matter.

Without going into the merits of the proposed form of rates including an initial or service charge, it appears clear from the evidence that the Public Service Commissioners tend to agree with officials of the utility companies on such matters before they become official cases before the Commissions. As a result, when they are introduced, the consumers may have the change suddenly sprung on them and if they initiate a complaint their representatives are likely to find a combination of utility men and Commission, arrayed against them, with the Commission's staff actually lined up in favor of the company program.

In brief the evidence tells the following story: At the 1926 Convention of the American Gas Association the three or four part rate was the chief subject of discussion. Mr. H. G. Wells, Vice-President and Chairman of the Executive Committee of the National Association of Railway and Utility Commissioners was present and delivered an address. He went from there to the Convention of the National Association of Railway and Utility Commissioners and introduced a resolution referring the question of the three part rate and its proper application to the Special Committee on rates, of which Chairman Prendergast of the New York Commission was a member (pp. 1815–1818; 1836–1840).

The Committee reported back to the 1917 Convention as in favor of the new form of rates and the Convention which was full of

railroad and utility company guests, adopted the three part rate, including $0.95 meter charge, $1.10 room charge, and a commodity charge of $0.80 per thousand cubic feet. The Chairman of the committee reported Mr. Prendergast as among those who unqualifiedly favored the new form of rates (pp. 1836–1840).

In 1928 the Brooklyn Union Gas Company filed a request for substantially the tariff adopted by the National Association of Railroad and Utility Commissioners, fixing, however, a $1.00 charge for the first 200 cubic feet of gas or less. There appeared no objection, so it went into effect. There was no objection because the Commission allowed it to be filed and go into effect without any public statement. The first thing consumers knew about it was when they found the new charge in their bills (pp. 1820–21).

Public protest led the company to send out a notice so skillfully written as to make it appear that there was going to be a reduction. Actually, up to a consumption of 3,100 cubic feet a month consumers pay more for gas under the new rates (pp. 1821). Due to protests, however, the case was reopened. Consumers objected to Chairman Prendergast sitting in the case on the ground that his mind was already made up on the question. But this protest was unavailing. The case was finally decided against the company with Chairman Prendergast and Commissioner Van Namee filing a strong minority opinion (pp. 1836–1840).

This minority opinion practically became the majority opinion in the Brooklyn Borough Gas Company case when the Commission, with Commissioner Lunn dissenting, decided in favor of the company's request for the right to establish the new form of rates. Outside of New York City, thirty-five gas companies have already been permitted to put into effect the new rate schedules without any real consumer representation in the matter (p. 1750). These have been granted as mere changes in form with no intention to increase the incomes of the companies. Actually, however, the Public Service Commission has apparently never gone thoroughly into the costs entering into the initial charge and it is fairly well established that the change increases the cost of gas, especially to the small consumer.

What is more, we feel that this initial charge is really a concealed service charge and New York law specifically prohibits a service charge by gas companies. We are likewise of the opinion that any move to legalize such a service charge should provide for safeguarding the consumer interest in having such a charge based on a fair allocation of the costs involved.

From the facts here recited it appears to us that the consumers of gas in New York City have found no protection under present regulatory machinery and that to all intents and purposes their interests have been neglected by the Public Service Commission.

Section 7. No Initiative By Public Service Commission

Evidence of the complete lack of initiative on the part of the Public Service Commission is manifest. Not only has the Commission failed to push the public interest aggressively, but it has openly taken the corporation attitude toward efforts of consumers to make their voice heard.

Exhibits 17 to 23, offered by Chairman Prendergast show that out of 7,372 formal cases considered by the Commission in the eight years from 1921 to 1928 inclusive, only 210 represented proceedings initiated by the Commission of its own motion, and 106 of these had to do simply with failure to file reports. In this period the Commission initiated only 40 of the 981 rate cases.

These exhibits also show that the Commission's initiation is growing weaker, for 162 of the 210 cases initiated by the Commission belong in the years 1921 to 1923 inclusive. In the years 1924 to 1928, inclusive, the Commission exercised its initiative in but 22 rate proceedings.

Contrast With Other States

This lack of initiative contrasts with the attitude of Commissions in Massachusetts, Maryland, Indiana and Pennsylvania where it is felt to be a part of the Commission's responsibility to defend the public. Those states recognize that consumers cannot hope to meet the large companies on even terms, and to a greater or lesser extent put the facilities of the regulatory machinery behind the public's complaint.

Beginning in 1915 in Maryland rate matters and other complaints came to be initiated by the Commission itself. The Commission would enter the complaint of its own motion and the assistant counsel for the Commission, who came to be known as the People's Counsel, would appear on behalf of the public and would try the public's case. These assistant counsels appearing as representatives of the public used the technical assistants of the Commission as advisers and witnesses (pp. 1412–13).

Mr. Thomas J. Tingley, former People's Counsel in Maryland, testified that knowledge on the part of the corporations that proceedings will be instituted where rates are too high apparently leads in Maryland to a great number of voluntary reductions, which are accepted and approved by the Commission without formal hearing (p. 1423). He said that voluntary reductions in rates were frequently brought about when holding companies came in to purchase operating companies (p. 1428).

Commissioner Howell Ellis of Indiana testified to a similar more liberal conception of the Commission's function on the part of the Indiana Commission. He said that the Commission is not technical in dealing with consumer complaints. When a complaint is filed they make inquiries and if it proves to have merit, even though the technical requirements are not complied with, they proceed to make further investigation and call in the utilities. In two instances where there were withdrawals of names bringing the number below the statutory requirements the matters complained of were satisfactorily adjusted (p. 3019). The Commission's engineering and accounting staffs are open to the municipalities (p. 3021).

The importance of this aggressive attitude on the part of the Commission is stressed by Mr. Harold Evans, former member of the Pennsylvania Public Service Commission, who believes that the public should be called upon to establish no more than a prima facie case after which the Commission should proceed of its own initiative. He says:

> *"The Commissioners themselves must have the attitude that they are defenders of the public interest, that they are to take the place of the force of competition in regulation of the public service companies"* (p. 4131).

Long Island Lighting Case

The failure of the machinery of regulation in New York to protect the consumer's interest is revealed in the extensive testimony bearing on the attempt of certain citizens of Belmore, Long Island, and vicinity to start a rate case against the Long Island Lighting Company. The treatment of complaint is in striking contrast with the attitude of Commissions in the other states referred to.

Twice in the course of six months the Long Island Commuters' Association filed a complaint with the Public Service Commission signed by more than twenty-five customers of the Long Island Lighting Company. This was a well drawn complaint showing that for several years the company had been making more than 14 per cent profit on its electrical capital and that with a fair profit it could reduce its 10 cent rate to small consumers to 6½ cents or 7 cents. It asked the Commission to investigate.

On the filing of the first complaint the Public Service Commission granted the company two extensions of time, the second being granted two days after it had been notified that the company was using pressure to get the signers to withdraw their names. Actually the company utilized a local lawyer who with the help of the company's local manager persuaded eighteen of the twenty-nine signers to withdraw. The complaint was returned. It was refiled with new signatures and the process was repeated, although the Commission had in its hands a letter from one of the signers who had withdrawn, stating the circumstances, recognizing her mistake, and asking that her name be restored to the petition.

All the papers connected with this case were considered by the chairman of the Commission in conference with the secretary. But the Commission ordered the secretary to return the complaint and so far as the Commission was concerned the matter was closed. The company paid the lawyer, who helped in securing the withdrawal of signatures, $100.

The testimony shows that the company's representatives led the signers to believe that a rate case would merely delay a rate reduction.

The Commission's general investigation of the profits of utilities under its jurisdiction, begun when the present investigation was pending, revealed that in 1928 the Long Island Lighting Company made a profit of 16.83 per cent on its reported electrical capital and Chairman Prendergast undertook by negotiating rather than by initiating a rate case to persuade the company to reduce its rates. As already noted the Company challenges the basis on which the Commission determined its rate of return, but the figure is based on the Company's own report to the Commission.

No rate reduction was made by this company until March 1st, 1929, when it reduced the maximum rate from 10 cents to 9½ cents a kilowatt hour. Then on January 1st, 1930, it announced another reduction to 9 cents at the same time introducing a minimum charge of $1.00 per kilowatt of demand.

The case is a significant commentary on regulation in New York State. In spite of all protestations that the Commission always makes sure that petitioners have been satisfied even in cases where signatures are withdrawn, this petition, citing facts which warranted a rate case on the Commission's own motion, was dropped when the company used improper methods to persuade individual consumers to withdraw their protests.

The Consolidated Gas-Brooklyn Edison Combination

The New York Public Service Commission never acted more openly as an ally to the utiltiy companies than it did in connection with the absorption of the Brooklyn Edison Company by Consolidated Gas in the summer of 1928. This combination meant the rounding out of the control of a single company over the electric power of New York City. It meant the creation of a giant utility with assets of more than $1,000,000,000. It meant the culmination of a series of mergers in practically every one of which considerable quantities of water had been injected into the capitalization.

The proposal challenged very careful scrutiny by the public and its representatives to make sure that the interests of consumers were protected as well as those of stockholders.

Yet the evidence shows that the only consumer representative who sought actively to inquire into the real issues involved was almost crudely brushed aside at the demand of Mr. John A. Garver, counsel for and director of the Consolidated Gas Company.

The evidence shows that the public hearings were cut and dried, that they consumed altogether only two hours and forty minutes of time, and that the case was practically decided beforehand in private conferences between President Matthew S. Sloan, then of the Brooklyn Edison Company and now of New York Edison Company, and Chairman Prendergast.

Mr. Sloan testified that prior to the first hearing, July 18, 1928, he had five or six conferences with Chairman Prendergast in regard to the proposed consolidation, and that according to his recollection they both agreed that the carrying out of the plan would be in the interest of the consuming public. He also conferred with Commissioner Pooley and probably with Commissioner Lunn in advance of the hearings (pp. 5460-62).

Such admissions explain to your Commission why, with such an enormously important matter up for their sanction, no commissioner asked a significant question tending to develop evidence on the issues involved. They explain the impatience shown by counsel for the companies and Chairman Prendergast at the attempt of a representative of the public to present its side. A representative of the public was clearly an outsider—as Chairman Prendergast said, he owned no stock.

Moreover, the facts in connection with this hearing, as developed from various sources in the evidence before us, lead to the conclusion that the treatment of the representative of the Public Committee on Power was far from warranted and constituted a violation of the entire spirit of the Public Service Commissions Law. Both the announcement of the proposed combination in a letter signed by President Cortelyou of Consolidated Gas Company and the petition to the Commission recognized a distinct consumer interest apart from that of the stockholders (p. 1911).

Mr. Cortelyou's notice said in part:

> "In behalf of the proposed merger, duplications of plant will thus be avoided and the most efficient plants can be utilized to their full capacity, while unification of service will necessarily result in economies that will redound to the benefit of the public as well as to the stockholders" (p. 1911).

We are convinced that this assumption by the corporation itself of a public interest, repeated practically verbatim in the petition to the Commission, entitled representatives of the public to intervene and to press any issues which the Commission might neglect. We feel that this was especially necessary in view of the demonstrated failure of the Public Service Commission to afford the public active representation. In fact a careful reading of the brief submitted by Mr. Morris L. Ernst on behalf of the Public Committee on Power shows that it was the only party in the entire case to consider seriously any issue save the mutual satisfaction of the stockholders involved.

Actually Mr. John A. Garver, counsel for the corporations, insisted on the exclusion of Mr. Ernst as an actual party with the right to cross-examine the witnesses and Chairman Prendergast assented with the tacit agreement of Commissioners Van Namee and Pooley. It is not necessary here to go into the details. It is sufficient to note that the Commission sanctioned the plan with the the exchange of stock on exactly the basis proposed by the corporations without securing a definite promise as to the advantages to be shared with consumers.

We have already discussed how the public was misled into believing that the reduction in the coal surcharge was its share of the savings due to consolidation. Within thirty days of this announcement the Consolidated Gas Company raised the quarterly dividend on its common stock to $0.75. This meant a yearly rate equivalent to $6.00 on the old shares before they were split, compared with

the previous rate of $5.00. This meant that total dividends on the outstanding common stock of Consolidated Gas including that exchanged for Brooklyn Edison Company, plus the dividends on preferred stock exchanged for Brooklyn Edison common, were at the rate of more than $35,000,000 a year compared with $27,267,532 paid on the equivalent shares of stock of both companies before the combination.

Thus we find that, where consumers received a $4,500,000 reduction in a coal surcharge which was clearly an unwarranted imposition, the stockholders received an increase of nearly $8,000,000 presumably as their share of the gain from the combination.

On October 31, 1929, the quarterly dividend was further increased to $1.00 establishing a $4.00 a year rate (p. 5386). This would raise the annual dividends on the shares of Consolidated Gas Company stock representing the combined common shares of Consolidated Gas Company and Brooklyn Edison Company before the merger to a total of approximately $45,000,000, or an increase of $18,000,000 over the dividends received by the same stockholders before the merger. Such an increase to stockholders, shows how small by comparison was the $6,274,000 which Mr. Sloan testified represented the consumers' share of the savings (p. 5358). And it must be remembered that $4,500,000 of the $6,274,000 represented the reduction of the coal surcharge which was a matter entirely apart from the merger.

The cash gain to stockholders following the merger has thus been about three times the alleged saving to consumers in rates, a large part of which represented merely the removal of the fictitious coal surcharge.

President Cortelyou of the Consolidated Gas Company made very emphatic the company's denial of the right of the City or representatives of consumers to be heard in consolidation cases of this nature. He testified that:

> "The Company denies that in hearings on consolidation either the City or representatives of the consumers have any right to be heard, because they lack a property interest" (pp. 5015–16).

Later he expressed the feeling that the interest of rate paying consumers in the consolidation was represented by the Commission (p. 5019).

We feel that the record reveals a lamentable failure of the Public Service Commission in this matter of representing the public interest. Throughout the entire hearing on the combination the statements on behalf of the corporations were taken at their face value, there was no cross examination; no opportunity to introduce countervailing evidence on behalf of the public, nor to present oral arguments to the Commission. The mere extension of the right to file a brief was in no sense a presentation of the public's side of the case.

Section 8. Municipalities Feel Regulation Has Failed

We find the feeling that public utility regulation has broken down by no means limited to New York City. Up-state municipalities have the same feeling that they have been practically abandoned by the State so far as the protection of their citizens against the unjust practices of utility corporations is concerned.

The evidence offered at the Buffalo hearing December 18, 1929, was especially impressive. It showed that in all phases of utility operation the companies were practically unregulated. This was so much the case that the Department of Public Affairs of the municipal government unanimously endorsed the bill introduced in the State legislature withdrawing from the Public Service Commission power over rates within a municipality where the franchise included the establishment of rates as a condition of its granting. In recommending this, the Chairman of the committee said:

> "In view of the fact that the experience with regulation of public utilities in the City of Buffalo by the Public Service Commission, I believe, has not been in the interests of the public and that this commission has given every consideration to the desires of the public utilities and has in effect regulated the public instead of the utilities, I would recommend:" (The text of the bill follows.)

International Railway Company

The failure of regulation to provide the necessary protection for the public interest in the utilities is nowhere more clearly shown than in connection with the operation of the International Railway Company which controls the street railway service of Buffalo. The high death rate from street railway accidents together with the large proportion of the company's income diverted to the payment of damage claims and legal expenses in connection with such damages provide one of the outstanding pictures of ineffective regulation before us. The excessive overhead costs of the International Railway since 1921 are also a feature of the story of Public Service Commission neglect.

The evidence before us shows high fares, poor service, antiquated equipment and multiplication of accidents to be the characteristics of street railway operation in Buffalo. Apparently the Public Service Commission has not only tolerated the condition in instances but has even sanctioned it.

The Commission has allowed the company to operate one-man cars even in congested traffic conditions, disregarding a great body of evidence showing the growth of accidents from this cause.

It has allowed the company to operate for years without the purchase of new equipment and with cars of which the safety equipment was useless.

It has failed to deal with the diversion of a large proportion of the company's income to other uses than the operation and upkeep of the properties.

It has refused to sanction a city bus system to supplement the inadequate service of the International Railway Company.

It has allowed the company to increase rates without checking the wasteful management and has not interfered to check the company's abandonment of certain lines to the detriment of the city nor forced it to restore the paving of streets where such abandonment has left deplorable conditions.

Disregard of Safety Results in Excessive Damages

Mr. Frank C. Perkins, President of the Buffalo City Council, offered comparative figures showing the number killed in street railway accidents in Buffalo compared with the numbers killed in similar accidents in three other cities of the same size. These figures show that in the 7 years 1921–27 there were 202 fatal street railway cases in Buffalo compared with 51 in Seattle, 79 in Toronto and 41 in San Francisco.

The three cities combined reported only 171 fatal street railway accidents compared with 202 for Buffalo alone. The population involved were: Buffalo, 555,000; Seattle, 508,000; Toronto, 570,000 and San Francisco, 700,000.

Further comparisons show that in the 7 year period injuries cost the International Railway Company $6,302,795, compared with the following costs in other cities: Cincinnati, $1,115,295; San Francisco, $470,374; Los Angeles, $1,652,141, and Seattle $567,518.

In the 8 years, 1920 to 1927, inclusive, the cost of damages on the International Railway amounted to $7,151,346,83 compared with $3,565,081.05 in the preceding 8 years. Mr. Perkins further testified as follows:

> "There is no question but that thousands of dollars could have been saved to the car riders in avoiding these damages and injuries if the car tracks had been properly maintained and the rolling stock kept in good order and one-man cars had not been used on congested and overcrowded lines."

And again:

> "If some of the millions which are being expended for injuries and damages were put into the tracks, cars and employment of proper crews and equipment, there would be no need of complaint on the part of the International Railway Co., that it has no money to properly construct tracks on Clinton, Seneca, Elk and other streets which have been neglected."

Excessive Overhead, High Rates and No New Cars

The evidence before the Commission shows that the cost of management of the International Railway Company jumped from an average of $54,800 a year for officers salaries and expenses in the years 1916 to 1920 to an average of $185,300 a year for officers salaries, expenses and Mitten Management in the years 1921 to 1925. Including the cost of injuries and damages, legal expenses, payments to the Management Corporation and the writing off of

intangible capital Mr. Perkins figures that from 1920 to 1926 about $9,000,000 of absolutely unnecessary and wasteful dissipation of income occurred and that on that account the Public Service Commission was not justified in granting the increase of fares to 10c. He said:

> "And yet in spite of these facts *which were offered to the Public Service Commission as evidence but which it refused to accept,* this same Public Service Commission has granted an increase in car-fare to 10c, without in any way curtailing the outrageous expenses of the company for Mitten Management under whose jurisdiction these staggering damages have been incurred."

Evidence was submitted showing that the International Railway Company has acquired no new cars since 1920; that it is operating 735 cars acquired prior to 1914; that prior to 1920 it rebuilt 96 cars acquired between 1900 and 1903 and that it has at least one car in operation that dates back to 1893. The data included detailed information compiled in previous years showing cars operating with life guards chained up, or broken or missing, also details of violations of safety rules supposed to prevent accidents in connection with the operation of one-man cars.

Excessive Cost of Street Lighting In Buffalo

Data was submitted to us showing that in spite of its proximity to the greatest source of hydro-electric power Buffalo paid more per capita and more per square mile for its street and municipal lighting than municipal lighting cost in other large cities. On a per capita basis the figures for 1927 were: Buffalo, $1.91; Los Angeles, $1.35; Cincinnati, $1.41; Chicago, $1.28; Boston, $1.24; New York, $1.21; Winnipeg, $1.07; Portland, $0.77; Seattle, $0.74, and Detroit, $0.56.

The evidence shows that the Buffalo General Electric Company was buying current from the Niagara Falls Power Company for $0.0025 a kilowatt hour and selling it to Buffalo for street lighting at $0.044.

The experience of Buffalo in gas and telephone charges has been no more favorable to the reputation of regulation in the State and the general feeling appears to be that from the point of view of the City regulation has failed.

Corporation Counsels Feel Law Should be Amended

The feeling on the part of municipalities that the Public Service Commission Law requires amendment was expressed in the hearings by Mr. Joseph T. McCaffrey, Corporation Counsel for Oswego. He conveyed to the Commission the recommendations of a special committee of the corporation counsels of the State. He expressed it as the almost unanimous feeling on the part of corporation counsels and village attorneys that the expenses of rate cases are prohibitive and that the present machinery, so far as rate cases are concerned, is inadequate.

The recommendations of the committee of corporation counsels included the following:

That the law be amended to require the Public Service Commission to establish a division adequately equipped to make appraisal of the property of public utilities for rate-making purposes;

That the jurisdiction and powers of the Commission be extended to companies holding or controlling a substantial interest in public utilities by stock ownership or otherwise;

That the Commission increase rates of public utilities only after a public hearing after notice to the municipalities affected;

That the commission be given power to impose conditions in permitting the abandonment of a franchise;

That reports by the public utilities to the Commission show separately receipts of utilities in each municipality;

That property values reported by the public utilities for tax purposes be presumptive evidence of the value of the same property for rate-making purposes;

And that municipalities have notice of and the right to become parties to all proceedings by the Public Service Commission affecting rates within the municipalities (pp. 3812 to 3843).

Section 9. Other Problems Associated With Successful Regulation
Holding Companies Dominate State

Three great principalities of electric power dominate the map of New York State. In the southern part of the State the Consolidated Gas System controls the metropolitan area. In central New York Associated Gas & Electric Company is rapidly rounding out its control. In the northeast section the Niagara Hudson Power Corporation controls, while western New York gives divided allegiance to Niagara Hudson and the Associated System.

Between them these three holding company groups control more than 12,000,000,000 kilowatt hours or about 90 per cent of the electric power distributed in New York State during the year.

This unification of control, which is also complete in the telephone industry, forms the background for most of the problems faced by regulation.

It raises the question whether separate municipalities or even the State itself can meet such power on even terms with the ordinary, machinery of regulation. In a very real sense the control of these vast combinations extends far beyond the field of public service into all phases of the political life of the State.

It raises the question whether the control over the economic destinies of communities and whole regions implicit in power control can be safely left in private hands.

It raises the question whether the financing and credit of the utility industry can be properly regulated when it is so largely influenced by the financial programs of these holding companies over which the State has no regulatory control.

It raises the question of intersate transmission of power between susidiaries of the same power combine, with the costs

underlying the price charged, outside the jurisdiction of the interested Public Service Commission.

It raises the whole question of pyramiding control, one holding company superimposed upon another, so that the Public Service Commission loses control over the ultimate ownership of the operating companies under its jurisdiction.

It is responsible for the reappearance in dramatic fashion of the old problem of over-capitalization with its tremendous pressure to secure the continuance of rates which will support the holding company securities.

It is responsible for the problem of controlling the cost of the operating companies where these include a variety of fees to holding companies and their subsidiary finance, engineering, construction, management, publicity and purchasing companies.

Unquestionably many of the factors in the breakdown of regulation heretofore discussed have been rendered acute by the accentuation of the speculative interest in utility securities resulting from the rise of the holding companies.

Long Island Capital Corporation

The Long Island Capital Corporation program, which was discussed at great length in the hearings, appears to us an example of one of the dangers in the holding company idea. The evidence shows that this corporation was created primarily to bolster up the value behind the highly speculative common stock of the Long Island Lighting Company.

The evidence also reveals the importance of having the public supervision of such matters in the hands of commissioners thoroughly imbued with the public interest.

Briefly summarized, it shows that E. L. Phillips interests, associated with W. C. Langley & Co., controlling probably a large majority of the 3,000,000 outstanding shares of the Long Island Lighting Co., petitioned the Public Service Commission to permit the newly created Long Island Capital Corporation to take over 1,600,000 or more shares of the Long Island Lighting Company by exchange of an equal number of shares of the capital corporation.

Messrs. Phillips and Langley testified that their purpose did not include any intention to bring other companies along with the Lighting Company under the control of the new holding company. It was altogether a plan to promote the financing of the Long Island Lighting Company along lines which this group thought desirable.

The evidence shows further that the 3,000,000 shares of no par Long Island Lighting Company common stock represented 30,000 shares of the original $100 par stock which had been split 10 for 1 and again 10 for 1. The books of the company showed these shares at $3,000,000 or $1 a share, and including their full equity in the property their book value did not exceed $1.70.

Previous to the Long Island Capital Corporation proposal the

market value of these shares had been selling as high as $92 a share and at the time the petition was presented to the Public Service Commission their market value was in the neighborhood of $70.

The Phillips-Langley interests, involved in this plan, openly proposed that after securing permission to transfer a majority or all of these shares of Long Island Lighting Company stock to the Long Island Capital Corporation, they would secure approximately $22,000,000 of new capital needed immediately by the Lighting Company, in the following manner:

They would sell senior securities of the Long Island Capital Corporation to the extent of about $22,000,000 resting on the Long Island Lighting Company common stock, not at anything approximating the book value of the existing shares but at prices commensurate with the market value of those shares, at the time of the petition about $70 a share.

They would use the funds thus provided to the Long Island Lighting Company to retire about $12,000,000 of short term notes representing recent construction and to provide about $10,000,000 of new capital required for the ensuing two years.

The primary advantage which the witnesses contended would accrue to the Long Island Lighting Company from this plan would be the provision of new capital on a basis which would rectify its overbalanced financial structure. In other words they contended that it would raise the proportion of the capital represented by the common stock from only 3.48 per cent to a more respectable figure which would eventually enable the Lighting Company itself to issue more senior securities.

Actually, the figures offered in evidence, show that this would be a mere financial trick. On a consolidated balance sheet basis the proportion of common stock outstanding in the hands of the public to the total securities so outstanding would, if anything, be reduced rather than increased by the proposed plan. The purchasers of the senior securities of the Long Island Capital Corporation would have a lien not on property but on the highly inflated common stock of the Lighting Company and the soundness of their investment would depend to a large extent upon the continued willingness of the Public Service Commission to allow the Long Island Lighting Company to maintain rates high enough to provide profits approximating those which the company is now making.

The following from Mr. W. C. Langley's testimony reveals the extent to which this elaborate plan rests upon the perpetuation of rates which, on the basis of the Public Service Commission's figures, produced excessive profits:

> "Q. Mr. Langley, of course, as I listen to you here your whole plan is predicated on the assumption that the existing net operating income of the Long Island Lighting Company and its subsidiaries is fair and reasonable and would be approved by the Public Service Commission. Is that correct?

Mr. Langley: Stable and constant, besides. Quite correct.

Q. Of course, if the Public Service Commission made any change in any of those factors your plan would fall or have to be modified?.

Mr. Langley: We would still have our recourse to the courts" (p. 5073).

It is too clear for argument that the sanctioning of this plan by the Public Service Commission would later bring strong pressure to bear on the Commission to perpetuate the present net earnings of the Long Island Lighting Company and so to help it sustain the artificial market value of the $1 common stock. Any other course would mean that the Commission was exposing innocent investors in the senior securities of the Long Island Capital Corporation to gross exploitation.

Yet Chairman Prendergast, the sitting Commissioner in the case, recommended the granting of this request, after brief hearings in which there was no representation of the public and practically no cross examination of the Messrs. Phillips and Langley. The case is an outstanding instance of the danger when commissioners are not thoroughly alert to the public interest.

The Problem of Control of St. Lawrence Power

The general question of development of St. Lawrence River power has been referred to another Commission. For that reason we do not deem it to be within the scope of our general inquiry.

There are, nevertheless, certain phases of the problem which affect regulation under the Public Service Commissions Law. Our report would therefore be incomplete without a brief word on the subject.

In a sense, the problem of developing St. Lawrence River power follows naturally the discussion of holding companies with their practically unregulatable control over the State's electrical energy. The readiness of these holding companies to base an excessively large financial superstructure on the profits they expect to derive from monopoly control of power would quickly extract from this great hydro-electric project all the advantages that should accrue to the public from cheap power.

The development of St. Lawrence power will put at the disposal of the United States a capacity of 750,000 kilowatts and an annual output of 4,900,000,000 kilowatt hours. In other words, as a source of power for the homes and industries of this State, it exceeds the present development of Niagara by a wide margin. Its annual sales of power would very closely approximate the present sales of all the electrical properties of the Consolidated Gas System.

One of the outstanding abuses of the prevailing system of rate control is that it permits the utility companies of the State to build up enormous values, justified by potential earning power, which has no real relation to their actual cash investment. With

private development and operation, St. Lawrence River power would afford an unparalleled opportunity for the extension of this evil and would impose one more obstacle in the way of developing some sort of effective public competition.

The testimony of Chairman Floyd Carlisle of the Niagara-Hudson System indicates pretty clearly what would happen if his company was granted the privilege of developing this power resource. He states that the Frontier Corporation, created to take over the riparian right on the St. Lawrence originally acquired as farm land by the Aluminum Company of America and the General Electric Company as far back as 1907, had already attained a book value of $7,200,000. It is not a public utility; it is simply a company owning land. Its value is due entirely to its strategic position with reference to future hydro-electric development.

"We believe," said Mr. Carlisle, "that the right to the falling water for power purposes is in the owners of the riparian rights, which is largely with the Frontier Corporation" (p. 3626).

Mr. Carlisle asserted that the right to falling water has the same kind of value as a piece of land, and in general indicated that its value would be based on the capitalized earning power of contracts for the sale of the power (pp. 3626–3645).

Chairman Prendergast, in a written answer to the question "What position has the Commission taken with respect to the valuation of water rights?" admitted that such valuation would be based on the earning power. He said.

> "The position which the Commission has taken with respect to water rights may be briefly summarized as assuming that a water right had no value as such where there was no prospect of utilizing it for power purposes; where it was to be used for power purposes we have attempted to fix a value *on the earning power of the water right* based on the energy which could be developed, on the output of the proposed plant deducting the cost of the development plus the cost of operation."

Thus the question of capitalizing water rights really leads into the vicious circle which is defeating regulation. Rates which determine earnings are supposed to be based on valuation. But the valuation of these water rights is not in terms of what companies years ago paid for the riparian rights, but in terms of earning power which is determined by the rates, etc.

If the State of New York once surrendered its ownership of the vast source of power represented by the falling waters on the St. Lawrence River, the present power laws would furnish no safeguard whatever against the establishment by the utilities of the right to earn a return on the full value of these resources, which would enforce an intolerable burden upon the people for generations.

If the final decision in the case of St. Lawrence power development should be in favor of private ownership, the grant to the company should include the provision that only actual investment would ever enter into the rate base. The present water power act contains no such safeguard.

Accounting System as Means of Control

The testimony shows almost unanimous agreement that the present uniform classification of accounts is inadequate to meet the needs of effective regulation. The classification was adopted along lines recommended by utility executives and consequently tends to conceal many important elements in cost.

Early in the hearings Chairman Prendergast admitted that the present schedule for plant account was not adopted to determining the cost of service to various classes of consumers (p. 954). In other words the present accounting procedure has definitely assisted the companies in maintaining an antiquated rate structure distinctly unfair to the millions of small consumers of electricity.

It is interesting to note from Chairman Prendergast's testimony that the present classification of accounts makes it impossible to distinguish between publicity expense aimed at increasing the demand for service and the expenses connected with utility propaganda which is often hostile to the public interest (p. 976).

In a later section of this report we will go more fully into the failure of the accounting procedure to reveal certain expenditures in connection with special franchise tax adjustment which we believe to be highly questionable from the public viewpoint.

The importance of cost finding in the utility industry received considerable emphasis in the testimony of Morris L. Cooke. He said:

> "In industries which are not competitive, there is not free play of social forces to determine market price on the basis of value of service, so that something equivalent to value of service must be estimated indirectly.
>
> "Every possible fact must be ascertained to guide regulatory bodies in determining a just price, and cost is one of the most significant facts.
>
> "First it enables the regulatory bodies to set a price which will yield the producer a profit; second, it enables the regulatory body as representative of consumers to estimate from that cost base what would likely be the market price if the industry were competitive" (p. 4088).

The most important testimony on this matter of accounting was that of Mr. J. C. Dickerman, engineer. He defined it as the first obligation of a Commission clothed with complete regulatory authority to require "the lowest possible non-discriminatory rates for the service rendered to all classes of consumers by the utility consistent with the necessary costs of furnishing that service,

including a return or profit on the investment such as will induce new capital to enter the business and which will maintain the active interest of competent management."

To accomplish this the system of accounts must reveal all pertinent facts. He said:

> "Unless the annual reports in large measure actually supply the commission and through it the public with comprehensive, accurate and pertinent data necessary for intelligent regulation, they are useless and should not be called for. Disconnected, partial, jumbled data, as presented in all too many reports to Public Service Commission today are misleading to the public. They conceal and distort rather than clearly and squarely reveal the essential facts upon which rates, service and security issues are rightly predicated."

Mr. Dickerman criticized the basis of reporting the New York Public Service Commission. He says:

> "I am very emphatic that the expenditures should be classified so that the cost of the respective functions of production, transmission, distribution, handling of customers and new business affairs, should be very well determined, very well separated, leaving as little as possible thrown into the so-called items of general expense" (p. 4927).

He said that it is possible to get such a large proportion of expenses allocated that what is left does not seriously affect determinations. Under the present system the small consumer pays more than his share of the profits (p. 4929).

Mr. Dickerman contended that a proper annual operating report from each utility should be a real resource of the Commission in establishing an informal prima facie case in reference to many complaints or petitions that come before it. It should enable the Commission to decide whether it should proceed to initiate a rate case (p. 4924).

The New York accounting system breaks down, according to his testimony, particularly in the classification of fixed capital expenditures, in not dividing between the transmission and distribution systems. It breaks down in the lack of separation of sales of energy to the different classes of consumers (p. 4936).

He held that the development of holding companies, with the elaborate interrelations involved, rendered a proper system of accounting even more important than it had been in the past.

After summarizing briefly the way in which the present system of accounts originated in the National Electric Light Association and was passed on through the Convention of the Association of Railway and Utility Commissioners to the New York Public Service Commission, he said:

> "It may be confidently asserted that this classification in important particulars reflects the oft repeated position of the

public utility industry that these accounts should not hamper the management in stating results of operations in such ways as in their judgment would be most effective in promoting their interests in the financial world, that they should exhibit only general conditions as to receipts and expenditures and be in no way a guide in establishing the equities of the various rates or even of the total earnings."

Mr. Dickerman outlined an ideal system of accounting as one which (1) positively and accurately reveals the true financial status of the reporting organization, and which also (2) so classifies expenditures relating to fixed capital, operation, maintenance, financing, etc., that the costs of the respective functions and of the various classes of service can reasonably be deduced directly without further analyses of original vouchers, etc., and (3) classifies revenues as specifically received from the various priced services or other sources.

Professor R. T. Livingston of Columbia University, also consulting engineer for the Phillips interests, concurred in the need for an accounting system which would provide more data on classification of capital accounts. He emphasized the importance of dividing fixed capital between production, distribution, utilization, commercial management and general management (pp. 4962–3).

From this testimony we are brought to the conclusion that the adoption of proper requirements in the matter of the uniform system of accounting will prove a very important step toward strengthening public control over the public services of the State.

The Problem of Grade Crossing Elimination

The testimony indicates that there is considerable duplication of function between the engineering staffs of the New York State Department of Public Works and the Public Service Commission in connection with grade crossing elimination. We feel that the major task of the Public Service Commission should be the active regulation of rates and services and that at the present time the Commission's staff is not large enough to meet even the demands along these lines effectively. We feel that in the interests of economy the Department of Public Works should have charge of the engineering work of the State.

The general suggestions offered by Mr. William M. Acheson, Chief Engineer of the Department of Public Works, seem practical. He proposed that the function of the Public Service Commission in connection with grade crossing elimination should be to issue a program, determining the order in which grade crossing eliminations should be undertaken.

After the order for the carrying out of such projects is issued, he held, all the engineering functions in connection with work should be carried out by the Department of Public Works. The Department should deal directly with the railroads instead of dealing with them through the Public Service Commission. Matters of

dispute between a railroad and the Department might be arbitrated by the Public Service Commission. We endorse the general outlines of this plan.

Inadequate Salaries of Staff and Employees

An examination of the payroll of the Public Service Commission shows that the salaries of the employees and staff are too low whether compared with like positions in other departments of the State or in private municipal employment.

The compensation of a large percentage of the workers in the lower grades of the service is below the standard of reasonable health and comfort fixed by governmental agencies, while the pay of a great many of the professional and skilled employees is barely on the border line and in many instances below such a standard.

The enormous growth of the public utility business in this State in the last decade has brought with it a great increase in the burden and responsibility devolving upon the Chairman and other members of the Commission. Testimony shows that the property under their jurisdiction has increased from $1,566,000,000 to $3,220,000,000, while the Commission is now dealing with combinations of statewide proportions. In view of this growth of responsibility and the increased burdens which it entails we feel that the salary of the Chairman of the Commission, upon whom the administrative responsibilities of the Commission chiefly devolve, should be raised to $25,000 and that the salaries of the other commissioners should be raised to $20,000 a year.

The compensation of the legal department is likewise worthy of the attention of the Legislature. The present head of this department appears to be a man of real ability, energy and wide experience. He must give his entire time to the duties of his office. In addition to advising the Commission, laborious legal research, appearances before the Commission and general charge of his staff, he meets the ablest and best paid lawyers of the country as adversaries in the highest courts of the land and in the most important and complex litigation.

His compensation as well as that of his staff is in no way comparable to that received in private practice, or by the lawyers in the employ of the regulated companies.

The foregoing facts may account for the transition of valuable and experienced talent from public to private service, too often to the disadvantage and loss of the State.

A sense of loyalty and devotion to the public doubtless keeps many in the service, but we believe that a more substantial recognition of ability, experience and fidelity is due to this type of public servant.

Moreover, unless the reward of able and devoted public service can be brought to approximate that of the utility concerns and other private clients and employers, the highest efficiency and constancy of service will become increasingly difficult to secure.

Section 10. Commission Accounting Conceals Expenditures on New York City Franchise Tax Adjustment

Gross neglect on the part of the Public Service Commission in checking the validity of company expenditures charged to operating expenses is revealed by evidence submitted by President Matthew S. Sloan of the New York Edison Company in answer to questions concerning the adjustment of special franchise tax assessments.

Mr. Sloan's figures show that in the twelve years, 1918 to 1929, consumers were charged with a total of $1,302,782 paid to Mr. Benjamin F. Witbeck in connection with what appear to have been fictitious reductions in the yearly assessed valuations of Consolidated Gas Company properties in New York City for special franchise tax levies.

Mr. Sloan asserts that the amounts paid to Mr. Witbeck were charged at different times to two different accounts in the Commission's uniform system of accounts, either to "miscellaneous general expense" (account No. 781.3) or to "miscellaneous law and Court expenses not provided for elsewhere" (account No. 781.36).

This very confusion as to which account the expense should be assigned suggests that its validity as a charge to operating expense might well have been questioned by the Commission. Mr. Sloan says that the companies have no knowledge as to the extent of the knowledge of the Commission or its accounting staff as to these payments or their purposes and adds "but it is assumed that they have been checked and verified to any extent desired."

Mr. Witbeck had two separate contracts, one with the gas companies of the System and one with the System Electric Companies. That with the gas companies called for an annual fee of $10,000 and in addition from each company 25 per cent of any saving in taxes for such year under the assessment for the year 1918. The agreement with the System Electric Companies called for minimum annual fees from the several companies totaling $22,500 and in addition 20 per cent of the saving in taxes if any, on account of reductions in money of the full valuations for such year below the corresponding valuation for 1917.

From the gas companies he has received only the regular $10,000 fee from 1919 to 1929, a total of $110,000. But from the electrical companies he received $1,192,782.

The total apparent savings to the companies in special franchise tax payments, due to Mr. Witbeck's efforts, according to Mr. Sloan's figures, amounted to $6,163,791 compared with $31,645,092 actually paid by the System Companies in the twelve year period. From the point of view of New York City, if these reductions were bona fide, the question might well be raised whether the companies were not actually paying a rediculously small amount in return for the valuable privileges accorded them. But is is an open question whether the whole matter represents a bona fide proceeding.

Mr. Sloan's figures showing, for the System Electric Companies, the special franchise taxes paid, the savings which it is calculated Mr. Witbeck secured and the amounts paid to Mr. Witbeck, are:

SPECIAL FRANCHISE TAX PAYMENTS AND ALLEGED SAVINGS

Year	Special franchise taxes paid	Savings in such taxes (as calculated)	Total amounts paid Mr. Witbeck
1917	$1,586,630 61	.....	$1,397 69
1918	1,585,372 19	$294,831 96	74,242 81
1919	1,355,839 98	206,339 22	67,892 92
1920	1,509,491 33	138,540 20	53,032 56
1921	1,704,509 77	138,034 34	52,499 33
1922	1,717,404 91	473,834 69	109,057 49
1923	1,776,513 22	424,695 89	97,711 13
1924	1,632,819 64	574,847 00	132,668 83
1925	1,694,253 42	545,745 86	126,649 17
1926	1,807,443 28	556,608 25	128,821 65
1927	1,953,789 61	506,770 62	118,854 00
1928	2,051,516 26	493,095 33	116,119 06
1929	2,183,319 01	481,676 40	113,835 28
Total	$22,558,903 23	$4,835,019 16	$1,192,781 92

The chief supposed savings and consequently the bulk of the payments to Mr. Witbeck came from the electric companies, and were based upon savings in the amount of the assessed valuation compared with 1917. Between 1917 and 1918, when Mr. Witbeck first started operations as an employee of the companies, the final equalized value of the System electric companies fell from $77,977,400 to $66,403,900. By 1919 it had fallen to $57,935,900, a drop of $20,000,000 in two years.

A glance at the figures prior to 1917, however, reveals the fact that the 1917 figure was a highly artificial one, apparently completely out of line with the general trend. Between 1916 and 1917 the tentative value jumped from $61,986,000 to $96,200,000 and the final equalized value jumped from $57,458,300 to $77,977,400. Mr. Whitbeck's reductions in the next two years simply brought it back to the 1916 figure, and not again until 1929, due to the expansion of the properties outside Manhattan, did the final value figure reach as high a level as in 1917.

These facts are shown in the following table for special franchise tax assessments for the Consolidated Gas electric properties, based on Mr. Sloan's figures:

SPECIAL FRANCHISE TAX ASSESSMENTS

(Consolidated Gas Electrical Properties)

Year	Tentative	Final	Final Equalized
1914	$56,393,000	$51,993,000	$47,236,030
1915	56,138,000	51,875,480	49,464,980
1916	61,986,000	61,986,000	57,458,300
1917	96,200,000	83,350,000	77,977,400
1918	70,452,000	70,452,000	66,403,900
1919	70,525,000	61,508,000	57,935,900
1920	64,811,000	64,811,000	61,077,870
1921	70,463,400	64,898,400	61,308,938
1922	65,819,000	65,819,000	62,315,190
1923	70,065,000	70,065,000	64,726,870
1924	64,345,400	64,345,400	59,394,068
1925	68,171,400	68,171,400	62,851,128
1926	72,025,000	71,872,200	66,144,158
1927	78,618,000	78,618,000	72,272,740
1928	84,197,000	84,197,000	74,680,050
1929	92,217,000	92,217,000	81,661,800

These figures, in our opinion, leave a big question for the corporation to explain. Why was 1917 chosen as the base year by comparison with which Mr. Witbeck's compensation was adjusted? Apparently it was purposely made easy for Mr. Witbeck to collect large sums, which were charged to operating expenses with the excuse that they represented pay for savings in the way of taxes.

The circumstances are even more peculiar. For further facts submitted by Mr. Sloan indicate that prior to his employment by the companies in or about 1918 Mr. Witbeck was employed by the State Tax Commission. Investigation at the Tax Commission reveals that while employed there he was concerned with the fixing of these very special franchise assessments.

This circumstantial evidence makes the question even more pertinent. Why was the Consolidated Gas System interested in conniving at the payment of large sums of money to Mr. Witbeck on such an obviously artificial basis? There is also the important question as to why the Commission never checked up to find whether such payments were legitimate or not.

The facts so far developed press for further investigation. If the tax reductions shown in Mr. Sloan's report were bona fide they mean in the aggregate millions of dollars lost to the taxpayers of New York City.

If the tax reductions prove to have been really fictitious the charging to operating expenses of payments to Mr. Witbeck might prove in the nature of a fraud. It would be well to get to the bottom of this transaction. In any case, a system which requires the expenditure of over $1,300,000 in 12 years along the lines indicated could well be modified.

Additional questionnaires, aiming to develop the information necessary to solve this problem, were sent by the Commission on Revision to President Cortelyou of the Consolidated Gas Company, to President Sloan of the New York Edison Company and to Vice President Nickerson of the Consolidated Gas Company, on February 14, 1930. Complete answers have not been received, and Mr. Witbeck has persistently failed to answer the questionnaires sent to him.

Valuable information is being withheld. We feel that it can only be brought to light by more searching inquiry.

Section 11. Municipal Competition

We have already shown by an analysis of the evidence that so-called regulation has had very little effect on the rates charged consumers for the various public services. The evidence further forces us to the conclusion that the existence of publicly operated plants and distribution systems in certain municipalities and in the province of Ontario has had more effect on the general level of electric rates than has all the regulatory machinery.

We have already referred to the fact that the lowest rates in New York State are found in the vicinity of the Jamestown municipal plant, and that generally speaking rates are lower in the region contiguous to the territory served by the Ontario Power Commission. Here we wish to call attention to comparative studies of the rates charged by publicly operated and privately operated plants.

Pacific Coast Experiments in Municipal Distribution

There are according to the evidence, 16 California municipalities which buy power but own their own distributing systems. They range in population from 500 to 80,000. Their rates are comparable to or lower than those charged by private companies in the same area. Net earnings for the fiscal year 1927–28, after deduction of interest and depreciation, amounted to 30.4 per cent. on their investment. From earnings they had reduced their indebtedness to 15 per cent of the present value of the plants. Since 1920 they have been able to finance their extensions and improvements entirely from earnings (p. 3220).

Los Angeles, securing most of its power from its hydro-plants but also purchasing some from the Southern California Edison, supplies electricity to domestic consumers at 5c for the first 50 kilowatt hours, 2½ cents for the next 125, and thereafter at 2 cents. The typical bill of the housewife lighting her house, using an electrical refrigerator and an electric range, with a consumption of 285 kilowatt hours a month, is $7.83, or about 2.75 cents a kilowatt hour. Commercial lighting rates range from 4.75 cents to 1.25 cents and industrial power rates from 1.77 cents to 0.86 cents a kilowatt hour. The low rates have led to the reduction of rates charged by private companies both within and without the city limits. The surplus for the year ended June 30, 1929, was $3,636,972 and the accumulated surplus amounts to $24,024,250 (p. 3244).

Pasadena owns its steam plant and distribution system. From 1906 to 1920 private and public lines were competing with each other, with the municipal system constantly forcing the private system to reduce rates. In the latter year it bought out the private system. Its rates correspond closely to those in Los Angeles.

After allowing for interest, depreciation and general reserve its 1927–8 surplus was over half a million dollars (p. 3245).

Seattle started its municipal plant in 1902 when consumers were paying 20 cents a kilowatt hour. Immediately the private plant cut rates to 12 cents. In 1905 the city began taking contracts with rates from 8½ cents for the first 20 kilowatt hours down to 4 cents. The private corporations reduced to 10 cents and 5 cents with a 10 per cent discount for prompt payment and in 1911 when the municipal plant had grown to be a serious competitor they met its rates. Since 1923 the city plant has charged 5½ cents for the first 40 kilowatt hours, 2 cents for the next 200 and 1 cent a kilowatt hour for all over 240 kilowatt hours. The average lighting rate for the Seattle municipal plant in 1927 was 2.73 cents per kilowatt hour. The private competitors have always followed the rate reductions of the municipal plant and rates in the State of Washington increase as the distance from Seattle increases. The municipal plant retires more than $1,000,000 of its debt each year and shows a good surplus (p. 3249).

Tacoma, which owns its own hydro plants and its distribution system has the cheapest rates of any plant in the country. Its domestic rates are 4½ cents per kilowatt hour for the first 40 kilowatt hours, and 1 cent per kilowatt hour thereafter. Its power rates range from 2 cents to 3 mills per kilowatt hour. It shows a regular profit and has accumulated a large surplus (p. 3247).

It is unquestionably due to the existence of these municipal plants that the average of rate on the Pacific Coast is lower than elsewhere in the country. In California the law provides not only for the right of a municipality to go into the power business if it chooses but also for the right of municipalities to join in forming power districts so as to gain the advantage of interconnection (pp. 3323–6). The success of plants already in operation has produced a tendency toward the increase of municipal distribution (p. 3329).

Other Parts of the Country Try Municipal Competition

The evidence before your Commission indicates that successful experiments with municipal operation of electrical utilities is not limited to the Pacific Coast. Figures from the Massachusetts department of public utilities indicate that in all cities over 1,000 in population in that State having private service, the consumers pay $2.995 for 40 kilowatt hours a month, or 7.48 cents a kilowatt hour. On the other hand 55 municipal plants in cities of over 1,000 in that State charge $2.59 for 40 kilowatt hours or 6.47 cents per kilowatt hour (p. 5720). The maximum rate charged by the Springfield municipal plant is 5½ while in Holyoke where there is competition between the municipal and the private plant the maximum rate is 4 cents a kilowatt hour.

Carlisle Presents Niagara Hudson View

Chairman Floyd Carlisle of the Niagara Hudson Power Corporation, which controls most of the power sold in the territory generally chosen for comparison with Ontario, considered it particularly his duty as a witness to meet the conclusions which would naturally be drawn favorable to public operation of such power systems. But a study of his testimony reveals at least one very striking contradiction which casts doubt on the validity of his entire point of view. Justifying the very low rates charged for the 75 per cent of the current which his system sells to industry on the ground that the resulting 74 per cent load factor makes possible lower rates to small consumers, he stated very emphatically.

> "I state from my experience of this business that if these companies had not built up this enormous power load, which is the largest of any group of companies in the world, the rates to the householder and the farmer would have been at least double if not treble what they are now" (p. 3587).

Later in his testimony Mr. Carlisle implies that they have beaten Ontario in developing the load factor because they have offered lower power rates. He says:

> "If the Hydro Electric of Ontario had the same industrial load that we have, their rate base for power sales would have to be very materially lower than they are" (p. 3677).

He points out that only 25 per cent of Ontario power is used industrially as compared with 75 per cent of Niagara Hudson Power (pp. 3670-71).

According to Mr. Carlisle, therefore, the Ontario system, if subject to the same limitations as the private system on the other side of the border, would be forced to charge double or treble the rates which that system charges to the householder and the farmer. But the contrary is true. The publicly operated Ontario system actually charges the householder and the farmer less than the privately operated system with all its heavy industrial load. And unquestionably the differential between what the householder pays the private companies and what a similar householder pays in Ontario is in part due to the fact that the New York householder pays part of the costs of the large consumer's service.

Mr. Carlisle's main answer to the challenge of the Ontario rates was that the Ontario system is practically free from taxes which the Niagara Hudson system pays to the extent of about $10,200,000 a year. He said:

> "Now, if the taxes had not been paid to the government, and had been taken off the bill of the household consumer, our rates to the household consumer would have obviously been much less than the rates of the Hydro of Ontario" (p. 3667).

Actually Mr. Carlisle's figures show that the domestic consumer paid his companies something over $14.900,000 for 276,-572,983 kilowatt hours of electricity, representing 4.67 per cent of the current sold by the combine. This is an average of about 5.1c per kilowatt hour. This compares with about 2c a kilowatt

hour paid by the average domestic consumer in Ontario. If the entire $10,200,000 tax burden were deducted from the charges for this small percentage of the total current sold, it would bring the average charge to the householder and farmer down to about 1.7c per kilowatt hour.

If, as Mr. Carlisle suggests, this is a fair deduction it means that about 3.65c out of the 5.1c now paid by the small consumer of Niagara Hudson power goes for taxes, or in other words, that the consumers of 4.67 per cent of the current sold are carrying the entire tax burden.

Cross examination revealed the fact that Mr. Carlisle had overlooked certain compensating features of the Ontario system. In the first place he had failed to take into account the saving to Ontario Municipalities due to an average rate of 2.09c for Municipal lighting compared with 5.8c on the New York side of the border. In the second place he had not referred to the fact that Ontario consumers, with the rates they are paying, are purchasing an equity in the hydrogenerating and transmission system, are retiring local bonds issued for the construction of the Municipal systems and are adding to the local sinking funds. These elements in rates mean that eventually the people of Ontario will own their property free and clear of debt.

Public Competition and Valuation

This review of the lower rates charged by municipally operated electric systems, in our opinion, supplements in an important way our analysis of the problem created by over-capitalization and the theory of valuation on the basis of cost of reproduction new.

The difficulties which have destroyed regulation are due to the attempt of the companies to collect an excessive return on more capital than the investors have actually entrusted to the enterprises, to collect cumulative profits where companies wholesale power to affiliated companies, and to collect whatever charges are necessary to support the capitalization of holding companies with their subsidiary finance and engineering companies.

In brief the attempt to maintain an excessive capitalization in proportion to the service rendered has caused the failure of regulation.

This excessive capitalization of the service rendered by private utilities also affords the most important explanation of the ability of publicly operated plants to charge lower rates.

In addition to the diversion of a greater proportion of income to paying for capital, the extra costs of private operation include the cost of regulation, the cost of carrying controversies to the courts, the unnecessarily large accounting and engineering staffs, and the exorbitant expenditures for advertising, sales, publicity, etc.

As examples of these last expenditures Mr. Carlisle testified that his companies were going to spend about $220,000 for magazine advertising and $300,000 for newspaper advertising in 1930 (pp. 3712-13); while President Sloan of New York Edison testified to expenditures by the system companies for advertising and publicity totaling $1,380,265 in 1928 and $811,167 in the first 11 months of 1929 (p. 5550).

In Cleveland, where the publicly operated plant has one-sixth the capitalization of the private plant, it represents an investment of $13,500,000 compared with an investment of $119,700,000 in the private plant. If the private plant had only 6 times the investment represented by the municipal plant its capital would total $81,000,000 or $38,700,000 less than is actually the case. A 7 per cent return on this excess capitalization puts a burden of approximately $2,700,000 a year on customers of the private company which must be paid out of rates, without taking into account the higher rate of return demanded by capital invested in a private enterprise.

There is in evidence testimony concerning a comparison between publicly and privately operated companies in England made by C. A. Baker, American Institute of Electrical Engineers. This study showed that, as regards capital expenditures for each kilowatt of maximum load (that is to say, for a given capacity for meeting the demand for energy at any time), the private companies have expended in cash or credit 60 per cent more than have the municipalities (p. 3223).

Your commission is convinced that by constantly pressing for higher valuations to support higher capitalization the privately operated utilities are not only defeating the purpose of regulation but are creating a contrast which furnishes the most patent argument for the public ownership advocates.

Public Competition as a Supplement to Regulation

These instances of successful public operation provide a sharp contrast with the long story of the failure of regulation so far as protection for the consumer is concerned. They appear to offer an antidote for the private business outlook which has rendered public utility regulation unworkable.

All Kansas cities of more than 1,000 population having private plants charge an average of $3.188 for 40 kilowatt hours a month or an average of 7.97 cents a kilowatt hour. In Kansas cities with municipal plants the average is $2.845 for 40 kilowatt hours or 7.11 cents a kilowatt hour (p. 5721). In New York 35 cities of under 25,000 population with private service have an average charge of $3.621 for 40 kilowatt hours a month or 9.053 cents per kilowatt hour compared with averages of $3.059 and 7.647 cents for 33 municipal plants in the same grouping (p. 5722).

Cleveland Provides Example of Effective Public Competition

Cleveland, Ohio, provides one of the best examples of the effectiveness of public competition. In 1911, when its private company was charging 10 cents a kilowatt hour to domestic consumers, Cleveland set out to build a "3 cent" municipal plant which began service in 1914. The first result was a 33 per cent cut in industrial

power rates promptly followed by the Cleveland Electric Illuminating Company. On March 16, 1914, the City Council passed an ordinance fixing the maximum electric light rate in the city at 3 cents a kilowatt hour. The private company fought the matter through the utilities commission up to the State Supreme Court and finally in 1920 got an order entitling it to charge 10 cents for the first 36 kilowatt hours and 5 cents for all in excess (Sup. Court Rep't, 100 Ohio, p. 121).

Within six months after securing this decision the company cut its domestic rate in half and since then its customers both in Cleveland and throughout northeastern Ohio have been served for 5 cents a kilowatt hour. The reason was that people began to figure it was time to enlarge the "3 cent" municipal plant which was only one-sixth the size of the private plant. It was a case where the threat of municipal competition proved the force capable of regulating even where the company had full right of recourse to the Courts.

The Cleveland case is especially relevant because in the course of the years 1914 to 1920 the Cleveland Electric Illuminating Company resorted to the same methods used by the New York companies to defeat regulation. It claimed the proposed rates confiscatory, that they would not yield a fair return on the value of its property, that it was entitled to a value based on reproduction cost, etc. It carried the matter to the Courts and finally won, only to have its rates actually regulated by the existence of a small publicly operated plant.

The *Springfield, Ill.*, municipal plant charges electric lighting customers 4.8 cents a kilowatt hour for the first 50 kilowatt hours a month, with a special cooking rate of 1 cent a kilowatt hour. These rates are lower than those of corresponding privately operated systems in the state. Its $2.40 for 50 kilowatt hours compares with charges for the same service in cities served by private plants running from $3.28 in East St. Louis up to $4.68 in DeKalb. For 1,500 kilowatt hours of commercial lighting it charges $30 compared with charges running from $58.50 in Peoria and Quincy up to $73.50 in Elgin. For 4,000 kilowatt hours of industrial power (30 hp. connected load) it charges $68 compared with rates ranging from $93 in Peoria up to $140 in 4 other cities served by private companies. It is earning a profit (p. 3249).

The *Jamestown, N. Y.*, municipal plant charges 4 cents for the first 50 kilowatt hours, 3.25 cents for the next 50, 2.5 cents for the next 900, 2 cents for the next 10,000, 1.6 cents for the next 20,000, 1.2 cents for the next 50,000 and 1 cent for all in excess.

Ontario Affords Most Complete Example of Public Operation

The record contains a very considerable amount of evidence comparing electric rates under the Ontario system of public ownership and operation with those in corresponding cities and areas on the New York side of the border. In the first place it is interesting to note that Mr. Floyd Carlisle, Chairman of the great

Niagara Hudson Power system, was ready to go to the limit in endorsing the character, ability and efforts of the men in charge of the Ontario system (p. 3720). In the course of the Buffalo hearing he said:

> "Our company exchanges power with the Hydro-Electric of Ontario. The management is acquainted with the gentlemen who run and operate the hydro-electric power commission of Ontario. We have the very highest regard and respect for their character, integrity and ability, and I make no mental reservation in my mind that that is the best of all the publicly owned and operated public utilities probably in the world" (p. 3663).

He quotes from the 1928 report of the Hydro Commission emphasizing the policy and practice of the commission "to make as widespread and beneficial distribution of electric energy as possible and to extend to every locality that can be economically reached by transmission lines the benefit of electric service" (p. 2665).

Evidence in the record based on a cooperative study of comparative costs and rates in Ontario and Western New York by Dr. H. W. Peck of Syracuse University, J. B. Reid, consulting engineer of New York, Dean Louis Mitchell of the school of applied science of Syracuse University and Professor Ralph Dewey of the department of economics of Ohio State University, shows that on the average for all services the private companies on the New York side of the border charge about 40 per cent more per kilowatt hour than do the municipalities on the Ontario side. It shows that, taking only the retail sales, the average charge to consumers per kilowatt hour was 70 per cent higher in New York than in Ontario.

The report of this group of experts shows that in the selected Ontario cities the average charge for domestic and commercial lighting is 1.88c per kilowatt hour compared with 5.64c per kilowatt hour charged for the same service by private companies in Wsetern New York; that the average charge for commercial power in Ontario is 0.87c per kilowatt hour compared with 1.13c in New York; and that the average Ontario charge for municipal street lights is 2.09c per kilowatt hour compared with 5.80c charged for the same service by the New York companies.

This committee found it more difficult to find comparable conditions in the matter of power bills, but Professor Peck says:

> "The limited evidence so far at hand shows the Ontario rates lower than would be suggested by the average revenue per kilowatt hour. Although the average ratios of revenue in New York to that in Ontario was 113 to 87, if the blocks of cheaper power sold directly to the consumer by the Hydro Commission were averaged in, the rate spread between New York and Ontario would be considerably increased" (pp. 3230–3235).

Comparative consumer bills for various classes of consumption in Buffalo, Rochester, Syracuse, and in Hamilton and Toronto, Ontario, are also in the record. These are taken from Electrical Utilities, a book by Dr. W. E. Mosher of Syracuse University and associates. These bills show that a domestic consumer using 36 kilowatts in a month would pay $1.59 in Buffalo, $2.69 in Rochester, $1.98 in Syracuse, $0.95 in Hamilton and $1.03 in Toronto. If he used 175 kilowatt hours in a month he would pay $5.01 in Buffalo, $9.75 in Rochester, $6.15 in Syracuse, $2.71 in Hamilton and $2.33 in Toronto. For consumers of industrial power their bills in the two Canadian cities would be lower up to a consumption of 10,000 kilowatt hours a month with a 30 kilowatt hour connected load. When their consumption reaches 288,000 kilowatt hours a month the comparative bills would be $2,380 in Buffalo, $4,052 in Rochester, $3,627 in Syracuse, $2,428 in Hamilton and $2,753 in Toronto. The authors point out that all these cities derive their power from Niagara and that Toronto is 62 miles farther from the source of power than Buffalo (pp. 2875–6).

That private business outlook will mobilize legal, engineering and accounting staffs to circumvent any changes in the law which are designed to limit the right of the utilities to collect such rates as are dictated by their so-called business judgment.

It is a game of strategy between two opposing sides—the public trying to regulate the utilities and the utilities trying to avoid being regulated by the public. If it was possible to legislate into corporations the will to be regulated, the present law might provide effective regulation.

The solution, then, in our opinion, in addition to establishing a stable basis for rate-making and providing for the assertion of the public viewpoint, must include some force which will make it appear to the interest of the corporations to accept real regulation.

As a suggestion along this line we have before us the very interesting testimony of Mr. Thomas F. Murphy, counsel for the New York Water Service Corporation. Mr. Murphy states that one of the reasons why the consumer does not need the protection of regulation in the matter of water rates charged by private water companies is "the non-exclusive aspect of the franchise with respect to a water company" (p. 2543). Explaining this, he says:

> "If there is dissatisfaction with water rates in any municipality, the courses open to the municipality are either to go into court and attack the reasonableness of the rates as a judicial question, or they may condemn or may authorize another company to come in and parallel the lines or they may parallel themselves * * *."

Mr. Murphy then makes his point even clearer:

> "Nowadays, checks afforded by condemnation, non-exclusive franchises, have been particularly effective in New York State and I think that the strongest evidence of that is the change that has been effected from private to municipal ownership in this state * * *. The transition from private to municipal ownership has been a very effective check with regard to rates" (p. 2545).

Mr. Murphy says that this explains why there are so few water rate cases taken to the Courts. He says:

> "I call your attention to the fact that there are very few water rate cases. Now I think it is worth while to consider why that is true. I think it is because of the effectiveness of the condemnation statute, the effectiveness of the non-exclusive franchise, and the constantly overhanging threat of having some one come along and take the property away from you * * *. Suppose we go all through the Court of Appeals with a water case, we might win the case, and just as soon as the decision is granted the community might decide—there is nothing to prevent them condemning your property, and we could not collect for the cost of the litigation" (pp. 2566-7).

Town Law on Water Supply Suggests Solution

Under the Town Law of the State of New York municipalities may build their own water supply system, even though this may parallel an existing private system or after authorizing the expense necessary for the construction of such a system they may use the money to acquire the works, franchises, contracts and property of any water works company supplying their district provided the expense does not exceed the amount authorized for the construction of the municipal system. In case such a purchase is determined upon, the price may be determined by agreement with the company or if no agreement is possible by condemnation proceedings.

A town may create a water district including territory outside its corporate limits or it may join with other towns in establishing joint water supply districts upon the petition of a majority of the owners of taxable property in the proposed district owning more than half of the taxable property. The law also contains provision for the financing of such joint water supply districts, through bonds issued by the district water commissioners and authorized by each town board included in the district (Sections 287a to 305b, Town Law).

Legislation Should Encourage Public Competition

In view of the facts brought out by this investigation showing that the most potent force tending toward effective public utility regulation is to be found in either potential or actual public competition, we recommend that all obstacles to public ownership and operation in the form of state legislation be removed and that legislation facilitating public operation by municipalities be enacted along the following lines:*

(1) Authorization of municipal ownership in this state, granting

* Provision is made for such public competition in the proposed bill which forms Part III of this report.

the municipalities the power to build their own system in competition with private systems without the necessity of securing a certificate of convenience and necessity from the Public Service Commission and to acquire private systems by agreement or condemnation providing the cost does not exceed the proposed cost of the municipal system.

(2) Authorization of municipalities to serve the surrounding territory without continual appeal to the legislature for that privilege. States in which cities owning their own plants have this privilege include California, Arizona, Idaho, Indiana, Iowa, Kansas, Kentucky, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Oklahoma, Oregon, Utah, Texas and Wyoming and under certain limitations relating to the neighboring territory, precentage of outside sales, etc., in Alabama, Connecticut, Massachusetts, New Hampshire, South Carolina, South Dakota, Vermont and Wisconsin.

(3) Authorization of municipal plants to replace private plants at the end of the franchise period of the latter without obligation on the part of the municipalities to purchase the often antiquated private plants.

(4) Authorization of municipalities to form power districts for the purpose of supplying electricity at cost to municipalities within the district. This would somewhat parallel the water district idea already referred to in the discussion of the town law on water supply. The bill at present before the Wisconsin legislature described to the commission by Mr. Alvin C. Reis, might serve as a model.

This bill provides that any two or more municipalities, whether contiguous or otherwise, may organize and incorporate as a municipal power district, as a result of the approval of a majority of electors in the various municipalities. The district would be divided into 5 parts, and each division or subdivision would elect one director on the governing board of the district, the directors to hold office for four years.

The board would have power to levy taxes upon the property within its borders for the purposes of the district. The district would have power to own, acquire or construct any water power or hydro-electric power plant within or without the district and to sell to the public, to any municipality, to the state or to any state institution heat, light, power service and other services. It would have the power of eminent domain, would have the right to use the public highways and to grant permits to any utility within the district.

New York City Has Facilities for Municipal Competition

The evidence before us suggests that the terms of the contracts under which the Consolidated Telegraph & Electrical Co. and the Empire City Subway Co. constructed the conduit system under the City streets afford an opportunity by which the City of New York might regain control of the distribution of its electric energy.

By the terms of the original contracts with the City, the City may acquire the property at any time by paying a sum equal to the actual cash capital invested in providing, constructing and equipping such subways plus the amount by which their net earnings during the period of operation have fallen below 10 per cent per annum

The City also retained the right to the free use of the conduits for all its needs.

Proven failure by the companies to carry out their agreements, according to the terms, would cause the subways to revert to the City "subject to any valid mortgages or liens thereon outstanding, not exceeding 50 per cent of the actual cost of such subways, and all leases or contracts then existing for the use thereof."

Actually the companies never carried out all the terms of these contracts. What is more, every device has been used to inflate the investment and keep the rate of return down so that the City, if it wanted to proceed to recapture, would have to pay a large accumulated back deficit.

The fact remains, however, that at least a third of the space in these conduits is still unoccupied and the City has a right to use this space for its purposes, which would provide means for distributing current if it should decide to try municipal competition as a means of regulating rates.

In 1916, New York City brought action against both the Consolidated Gas Company and the Empire City Subway Company for an accounting. Referees were appointed and in 1923 handed down estimates to the effect that up to the end of that year the cost of both companies was $53,000,000 and there were also in arrears $17,000,000 in 10 per cent earnings, making a total cost of acquisition by the City at that time $71,000,000.

This figure was probably excessive, but it would seem that even at that price it would pay the City to acquire these conduits under the old contract. Their ownership constitutes a monopoly control of the means of transmission for both high and low tension service. If the City owned and completely controlled the conduit systems it would not only derive income from the rentals but, of greater importance, by using its contract power it could lay down certain rates as conditions to using the conduits and so could control the cost of electricity and telephone service to its citizens.

PART II

THE BASIS OF RATE CONTROL

Prepared by Commissioner Bonbright.

Conclusions and Recommendations Concurred in by Commissioners Walsh and Adie.

Section 1. The Ineffectiveness of Regulation Under the "Present Value" Doctrine

In our opinion the greatest single weakness of the existing system of public utility regulation—and this applies not merely to New York State but to the country as a whole—lies in the hopeless difficulties inherent in the use of a physical valuation of property as the basis of rate control. Unless and until this fatal defect in regulating theory has been overcome, any attempt to revise the Public Service Law must fail to reach the root of the trouble. To a very large degree the other weaknesses which have been disclosed in the New York regulatory system, such as the understaffing of the Commission, the tendency of the Commission to become a purely judicial as distinct from a regulating body, and even the evils resulting from the unrestricted financial operations of holding companies are a repercussion from this more fundamental obstacle to effective control. We believe that we share this view with the great majority of impartial students of the problem and that the existing system would find almost no defenders were it not for the support which it derives from those utility companies which believe that its maintenance is in their pecuniary self interest. We propose in the section immediately following to indicate our reasons for believing that the present system is essentially unworkable. At a later point we shall then raise the question as to what substitute system may be acceptable.

At the present time, our entire American system of rate control with respect both to local public utilities and to railroad properties is based on the doctrine of the Federal Courts that a company under ordinary circumstances has a right to charge such rates as will yield it a reasonable return on the "fair value" of the property which it is devoting to the public service. This right, which was first clearly announced by the United States Supreme Court in *Smyth* vs. *Ames** is held to be a constitutional right, and it was conceived as marking the irreducible minimum below which neither a legislature nor an administrative commission might go in the exercise of its discretion to determine reasonable rates. When first developed it was by no means intended as setting the normal basis by which the fairness of a rate should be determined, and the Courts apparently assumed that a reasonable rate would oridinarily be fixed at some point between this lower limit of

* 169 U. S., 466 (1898).

fairness to the company and a higher limit of fairness to the consumer.** A very large degree of discretion was therefore intended to be left to the legislative or administrative branch of the government in fixing such rates as should be deemed, not merely non-confiscatory, but socially expedient. This point, though frequently ignored in discussions of the subject, is of fundamental significance because, as we shall point out later, a doctrine of confiscation which worked measurably well when used simply as an irreducible minimum of decency and fairness is quite unsuited to serve as a constant guiding basis of rate control. Yet by the force of economic circumstances it is precisely this latter role which the doctrine of fair value has in recent years been compelled to play. In any large rate case involving the entire level of rates as distinct from the rate structure, the whole question of the fairness of the rates, and not merely the question of the constitutional minimum, generally turns on the ability of the company to earn its operating expenses plus a fair rate of return on the "present value" of the property. The more important reasons why this criterion is in our opinion subject to fatal and practical theoretical difficulties will now be considered.

Indefiniteness of Concept "Fair Value of the Property"

The first objection to the continued use of "present value" as the basis of rate regulation rests on the highly indefinite and unobjective nature of the standard, "present value" or "fair value." This point has been repeatedly stressed by writers in the field of public service regulation, and the testimony before our committee has only served to emphasize its truth.

Even in an ordinary business transaction, the valuation of a large and complex industrial property is a matter of extreme difficulty and is necessarily a subject for judgment estimates rather than of objective tests. Public utility valuation, however, is subject to the further difficulty that the very meaning of the term "fair value," and not merely the practical devices for estimating this value, is indeterminate. Under the present law, the Public Service Commission is directed by the Courts to "find" the present value of the property as a test of the fairness of the rates but it is not told what is meant by this "value" which it is required to find.

On one point economists are unanimously agreed, and that is the phrase "value of the property" cannot be used in its ordi-

** The idea that a proper rate of charge is normally one that is to be fixed somewhere between the constitutional minimum and an upper limit of fairness to consumers is implicit in the famous dictum of Smyth vs. Ames in which the Court says: "What the company is entitled to ask is a fair return on the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth." This latter standard, based on the value of the service" rather than the "value of the property" has never been adequately explained by the Courts. If "what the service is reasonably worth" means what the public can be induced to pay for the service rather than go without, it clearly does not constitute a standard of rate control, since not even the company itself, if unregulated, would desire to charge more than this amount. If, on the other hand, it means something else, then no explanation of its meaning has been forthcoming from the Courts.

narily accepted sense of market or commercial value if it is to be accepted as a test of public utility rates. This is true because the commercial value of a public utility property is simply a reflection of its prospective earning power, of its ability to earn interest and dividends for its security holders. To take value, so conceived, as the basis of rate control would be to accept the most obvious kind of circular reasoning, since the fairness of the present and prospective earnings is the very matter in dispute.*

Courts and commissions, as well as economists, have generally recognized the absurdity of using market value, or valuation based on capitalized earning power, as the basis of rate control. They have attempted to solve the difficulty, however, not by a complete renunication of the doctrine that "value" is the proper criterion, but rather by insisting that this "value" must be arrived at by the consideration of other elements than either sale values or earning power. The two more important elements that must be "considered" are actual cost of the physical property, and reproduction cost at current prices, subject to certain deductions for depreciation and subject also to certain additional allowances for "going value" and for working capital. Even these elements are held not to be exclusive, as the Courts have held that all relevant factors must be taken into account and "given such weight as is just and right in each case." The difficulty with this attempted way of meeting the inherent objection to the use of "value" as a basis of rate control is that, while it rejects market value as the criterion, it fails to set up any alternative standard that is definite and objective. Instead, it simply sets up a variety of factors to be "considered," without indicating how they must be considered, and what weight must be attached to them in each case. A commission, no less than a company or a group of protesting rate-payers, is left in the dark as to whether the "present value" should be a half-way point between actual and reproduction cost, or as to whether reproduction cost must be given "dominant" weight. And even if "dominant" weight must be given to the latter type of cost, there remains the doubt as to whether "dominant" weight means exclusive consideration or whether it means simply, say 90 per cent weight as against actual cost. There is the still further ambiguity as to what is meant by "actual cost" or by "reproduction cost," as to what meaning must be given to that highly indeterminate term, "depreciation," as to what is meant by "going value" and how it is to be measured, and as to the hundred and one other items of dispute that arise in all large, hotly contested rate cases. The Courts have persistently refused to enunciate definite principles with respect to these elements in the rate base,

* The absurdity of using "value" in its generally accepted sense as a basis of rate control has been pointed out by President Hadley in his testimony, Hearings, page 1472. It should be noted that, while economists are in considerable disagreement as to what is the most desirable type of rate control, all of them agree that in no case is the "value of the property" a proper criterion. Probably the considerable majority of them would sanction an "actual cost" rate base; but it is important to note that even those who advocate reproduction cost as the rate base, take pains to point out that this reproduction cost does not represent the "value of the property."

declaring that valuation is not and cannot be made a matter of "formula," but that it must be subject to the use of judgment and discretion, first on the part of the commission but later on the part of a reviewing Court. But the trouble lies, not in the mere absence of a formula for *measuring* value, but rather in the absence of any definite standard of value by reference to which judgment can be exercised. As a result, the whole basis of rate control remains today unsettled, indefinite, and subject to renewed controversy and litigation in every important rate case which one side or the other finds it worth while to contest.

If any new evidence were needed of the highly indefinite nature of the standard, "present value," that evidence would be forthcoming from the testimony of the members of the Public Service Commission before our committee. No commissioner could give a clear-cut definition of the term, "fair value," nor was any of them able to account satisfactorily for the apparent inconsistencies in the methods of valuation adopted in recent rate cases. Chairman Prendergast, for example, testified that in the main, "book values" (which are supposed to reflect actual costs rather than present values) have constituted the basis of most of the recent decisions. Yet in the Plattsburgh Gas and Electric Case,* Commissioner Van Namee, who wrote the prevailing opinion, stated that:

> "At the present time, the courts hold that reproduction cost less depreciation, is a dominant element in fixing the valuation of the property 'used and useful in the public service.' "

The decision in that case, in which all concurred (Commissioner Van Voorhis concurring only in the result) apparently gave almost no weight whatever to actual cost in so far as it differed from reproduction cost.

Not only with respect to the relative weight given to actual as distinct from reproduction cost, but also with respect to all the other important factors in a rate case, the Public Service Commissioners have failed to make clear that they possess any definite standard by which they are being guided. "Depreciation," they say, must be deducted; but they do not say how this highly ambiguous term is interpreted, and its mode of measurement are not indicated. "Going value," they also agree, must be allowed for. But in response to questions from your committee as to how this value was estimated, the commissioners were able to give no light, beyond saying that the whole thing is a matter of "judgment" and "feeling" rather than of formula. Despite much effort and study, spent during the last five months in an attempt to understand the administrative policies of the Public Service Commission, we are unable to state with any confidence the policy of the Commission with respect to treatment of any one of the chief "elements" of value in a rate case. Indeed, we venture to attribute this failure to the fact that no definite policy exists, and we suspect that the commission simply follows the lines of least resistance in each individual case.

* Case, 2320, 1926 Rep., N. Y. P. S. C., 292.

In expressing our belief that the "present value" standard suffers fatally from its indefiniteness, we are not unmindful of the argument of public utility representatives that any such criticism is fast becoming groundless because of recent judicial decisions defining more precisely just what is meant by "fair value."* According to this view, the more important points in dispute, such as the relative weight to be given actual as distinct from reproduction cost, the meaning to be attached to "depreciation" as an item for deduction in the rate base, the necessity for allowance of "going value," have already been well-nigh settled by decisions of the United States Supreme Court—decisions which have been in favor of the companies on all of these points. The only reason why rate cases are still so contentious, it is alleged, is to be found in the obstinate and unreasonable refusal of public service commissions or of the municipalities to accept the plain mandates of the Courts; and this factitious difficulty, rather than the lack of a definite standard of valuation, is what is making rate regulation so difficult today.

We find no evidence, however, to support this alleged state of facts. So far from becoming settled by the gentle force of judicial precedent, the disputed problems of valuation remain quite as numerous as ever, and are becoming far more insistent than ever before. Anything like a complete discussion of this subject would require a review of recent Supreme Court opinions too extensive for the purposes of our present report. But it may be worth while, nevertheless, to indicate briefly how far from settled are the major points of dispute which utility counsel would like to consider "res adjudicata." It is argued, for example, that the Indianapolis Water case decides, once and for all, that spot reproduction cost is the "dominant" or controlling evidence in a rate case, and that actual cost has little or no relevance except as an *indication* of reproduction cost. Yet, while the opinion (though by no means the decision) in that case did come close to suggesting a viewpoint as extreme as this, the subsequent holding of the Supreme Court in the O'Fallon case† again throws doubt on the issue, in that it directs the Interstate Commerce Commission to "give due consideration" to reproduction cost, without indicating that actual cost should be disregarded, or without even implying

* Note, for example, the following quotation from the testimony of Mr. George B. Cortelyou, President of the Consolidated Gas Co. (Minutes, p. 5003):

"While some individuals are debating the philosophy of valuation and the extremists are trying to devise ways of circumventing the Constitution and the Courts, the Nation's great Court is patiently and persistently clarifying and settling these questions of valuation and rate of return, which have been troubling the public authorities as well as the Companies.

"The decision on rate of return, rendered last Monday in the Baltimore Street Railway case, is a persuasive instance. Matters about which this Commission took a great deal of testimony, in its early sessions, now appear to have been rendered *moot*."

One may point out that, while Mr. Cortelyou's first statement indicates that the Supreme Court is "settling" the problems of valuation, his second statement makes the directly inconsistent assertion that the most recent decision has rendered matters "moot."

† St. Louis and O'Fallon Ry. vs. United States, Supreme Court of the United States, May 20, 1920.

that "due consideration" means "dominant weight."* More than that, Mr. Justice McReynolds, in the ruling opinion, takes pains to say:

> "No doubt there are some, perhaps many, railroads the ultimate value of which should be placed far below the sum necessary for reproduction" (at p. 9).

But even were it to be assumed that, under present economic conditions, the Supreme Court has settled the issue between actual and reproduction cost, by rejecting the one and adopting the other, it would by no means follow that this issue would stay settled under very different economic conditions that are likely to prevail within the next decade. It should not be forgotten that the recent trend of the Supreme Court toward the acceptance of "spot" reproduction costs has come about as a result of a very unusual period of price stability, which has persisted from the year 1921 down to date. This plateau of prices has made it easy to think in terms of a normal price level, much higher than the pre-war level, and spot reproduction costs have therefore been far more persuasive as evidence of "present value," because they have seemed to represent a fairly normal price rather than a shifting, evanescent "price of the moment." All the expert economists who testified before our committee were agreed, however, that the continuation of price stability during the next few years cannot be counted on with any degree of confidence, and that a material fall in price levels is likely, though not certain, to occur. In this event, it is a foregone conclusion that the whole question of the weight to be given actual as distinct from reproduction costs will be fought over again in the commissions and in the courts, this time with the public utilities very possibly urging that the former factor be given greater weight "in view of new conditions," and with the municipalities insisting that the lower reproduction costs must be accepted. Without in any way predicting how this shift in position may affect the courts, it is absurd to suppose that the question will be brushed aside by the Courts as being *res adjudicata*.

Not alone with respect to actual versus reproduction costs, but also with respect to every other important item in the rate

* The fact that the O'Fallon case leaves the great valuation issues still unsettled has been recognized by Judge William L. Ransom, counsel for the Consolidated Gas Company, in a recent article which he published on that case. In that article he says:

"The O'Fallon decision left for the future many mooted questions as to what are 'the elements of value recognized by the law of the land for rate-making purposes,' how those elements and principles are to be applied to railroad property, and particularly what weight and effect must be given by the Commission to current reproduction costs and to what extent other factors may be deemed by the Commission to offset them or neutralize their effect. In other words, the O'Fallon decision cleared away the procedural and other obstacles to the right of the carriers to insist upon the valuation of their properties, for recapture of excess earnings or for rate-making, according to 'the law of the land' as established in the public utility cases so far as applicable; but the present decision left to the future nearly all of the vital and controverted issues as to what this valuation should be and how it should be reached, so long as it gives actual and substantial weight and effect to wages, prices, construction costs, etc., prevailing at the time of the inquiry."

"Undetermined Issues in Railroad Valuation Under the O'Fallon Decision," Political Science Quarterly, September, 1920, page 321.

base, there is no indication that the principles of valuation are being "settled" by judge-made law and that legislative action to secure a definite and workable rate base is therefore unnecessary. Who can say that the question of the treatment of depreciation, of obsolescence, of going value, of water-right values, and even of franchise value (when called by some less opprobrious and more plausible name, such as "easement" value), is at last in a fair way toward being disposed of by judicial precedent? If anyone, for example, could have claimed that depreciation was a settled issue several weeks ago, he would have been obliged to withdraw that claim as a result of the recent decision of the Supreme Court in the Baltimore Street Railroad case,—a decision in which the Court upheld the company in a treatment of annual depreciation reserve which contradicts equally the type of depreciation accounting advocated by the American Telephone & Telegraph system and the very different type of depreciation policy advocated by the Consolidated Gas Company and other gas and electric companies. But even before that case was decided, the Supreme Court, in the Indianapolis Water case, sanctioned a deduction for depreciation which expressly took account of the "probability of service life" of the company's assets—a factor which public utility counsel, supported by some very eminent engineering authority, persists in insisting should be left out of account. Not even the companies themselves, therefore, can properly claim that the great valuation issues are now disappearing from the realm of controversy, although they quite obviously are hopeful that these issues will ultimately be settled in their own interests.

"Present Value" as a Basis of Rate Control is Unworkable and Vicious on Administrative Grounds

Partly because of the indefiniteness and uncertainty of the very meaning of "present value," but even more largely because of difficulties inherent in any appraisals of large, complex properties, we believe that the existing scheme of rate control by means of recurrent property valuations has broken down, and will continue to break down because of its administrative difficulties. That it has in fact broken down in New York we believe to be a fair conclusion from the testimony adduced before this Committee. To this day the Public Service Commission has no means of determining whether the great body of public utilities under its control are earning more or less than a "reasonable return on the fair value" of their property. It lacks this means because it does not possess the one measure which, according to the Courts, *must* be applied before the reasonableness of a company's rates can be determined —an up-to-date valuation of the physical and intangible property. In the State of New York today there are public utility properties subject to Commission jurisdiction, amounting to many billions of dollars as measured by book values. A physical appraisal of all of these properties would cost perhaps ten million dollars. The

Public Service Commission has wholly lacked the funds necessary to make any systematic valuation of the properties subject to its control.

Defenders of hte "present value doctrine" may retort, of course, that the difficulty just mentioned can be remedied by larger legislative appropriations, giving to the Commission the large staff of engineers and appraisers necessary to make a valuation of all the utility property in the State. The difficulty with this solution, however, lies in the fact that, if the "present value" doctrine persists in the future, valuations will be out of date very shortly after they are made, and a revaluation will be called for at frequent intervals, in order to bring the obsolete appraisals up to date. We do not believe that the tax payers, or the consumers of utility service in New York State would or should be called upon to assume the tremendous financial burden of these necessarily recurrent appraisals. And yet nothing less than this is necessary if regulation under the "present value" doctrine is to accomplish the very aim which it is designed to accomplish.

It is only fair to add that most supporters of the existing theory of rate control deny the necessity of a frequent periodic reappraisal. They insist that, once the valuations have been made, they can be kept reasonably well up to date by various short-cut methods, such as the application of price indices designed to make corrections for any significant shifts in the unit prices of the inventories. An elaborate engineering reappraisal, they allege, will be quite unnecessary save at very long intervals of time. Without in any way denying that a revaluation, when made shortly after an initial appraisal, will cost very much less than the original one, we are convinced that even approximately accurate results cannot be reached by any such "pen and pencil method" as is suggested by the application of price indices and other short-cut devices. The persons who place their reliance on these devices almost invariably ignore the fact that the valuation of any rapidly growing utility property, no less than of any industrial property, is far from a mere matter of applying present-day cost prices to existing plant equipment. A valuation of property, if it has any economic significance at all, connotes, not a finding of the current prices at which a substantially identical property could be reerected, but rather an estimate of the service-rendering powers of the existing property as compared to those of an alternative new and modern property. This means that factors such as obsolescence and depreciation on the one side, and such as going value and appreciation on the other side, are vital parts of the picture. They can be estimated, if at all, only by the most painstaking engineering and commercial analysis of the property, and they are subject to very violent "change without notice" because of the constant improvements in the arts, and because of the rapidly changing industrial situation at the time of valuation. No application of current index numbers could suffice, for example, to bring down to date a valuation of the plant of the United States Steel Corporation or of the

General Electric Company made as little as three years ago. And the same thing is equally true of the more progressive utility companies, such as the electrical companies and the telephone companies.

But the direct money costs of reappraising public utility properties are by no means the greatest costs that the public must assume under the "present value" doctrine of rate control. Of far greater significance are those intangible costs, imposed alike upon company, commission and public, resulting from the perpetual controversy which rate-making by reappraisal must necessarily engender. That these controversies have existed in the past and do exist today, no one who reads the newspapers can deny. Who can deny, then, that they will perist in the future under a system of rate control which gives rise to so much difference of opinion, to so much litigation, and to so much incrimination and recrimination as the "present value" test must give rise to? Public utility companies today are spending many millions of dollars in order to inculcate in the minds of the public the spirit of friendly cooperation, of partnership as between the consuming public and its servant, the utilities. Yet all the advertising in the world cannot suffice to undo the harm done by the suspicion and hostility arising in cases like that which has arisen with respect to the rates of the New York Telephone Company. It matters not whether in this case the company may be entirely in the right and the Public Service Commission as well as the complaining municipalities in the wrong. The harm is done, none the less; and it will continue to be done, as long as regulation in this and other States is under the incubus of the "present value" doctrine.

As we have pointed out elsewhere in our report, the effectiveness of the whole system of public service regulation in New York today is threatened by the fact that the present Public Service Commission is under considerable public suspicion. People do not believe in it, because they believe it to be actuated by motives of favoritism toward the companies. On the other hand, some of the companies themselves, notably the New York Telephone Company, accuse it of gross injustice to them, with the result that they are driven to seek redress in the Courts. Both of these contentions in individual cases may be true, or they may be false. What is true beyond measure of doubt, however, is that no Commission that is subject to such terrific handicaps of ill-will can possibly function effectively in the public interest. Yet every Commission, whatever its membership, is sure to be subject to these handicaps if it must continue to work under a system of rate control where hundreds of millions of dollars of property rights hang upon its "judgment estimate" of the "fair value" of a vast network of public utilities. How can a Commission possibly preserve a reputation for unbiased action, when there are no real standards by which its bias or lack of bias can be measured?

We do not mean to imply that controversy will be completely ruled out and an era of friendliness and trust fully ushered in by

any type of regulation that it is humanly possible to devise. Certainly the plan which we shall propose as an alternative can make no such claim to perfection. We have no doubt that disputes will arise under this new scheme which will cause ill-feeling and charges of partiality very similar to those which have been constantly arising under the existing system. Nevertheless, we are confident that the scope of the controversy will be very greatly reduced, and that where ten major issues arise in which the public is pitted on one side and the utilities on the other, not more than one or two will arise under the new system, when once it has been thoroughly initiated and tested out by the inevitable "testing" litigation. Any new reform, of course, is subject to risks; and the change from the "present value" doctrine to some other doctrine of rate control may possibly lead to disputes of a far more serious type than we are now able to anticipate. But at least this may be said, that from the point of view of the evils to which we refer in this section, a system could hardly be devised which is worse than the present one.

Financial Unsoundness of the Present Value Principle

With all its administrative difficulties, and with all its indefiniteness of meaning, the "present value" standard of rate control might nevertheless justify a strenuous effort to make it workable, if the results to be obtained from its enforcement were desirable on economic grounds. We believe, however, that "present value," as the term is judicially interpreted, has no such economic merits as are claimed for it as a basis of rate control, and that it is unsound on grounds of financial and economic policy no less than on grounds of administrative expediency. The reasons for this unfarvorable opinion are not easy to state in a brief discussion; but an understanding of them is of such vital public importance that some explanation of them must be attempted here.

Any discussion of the economic merits of the "present value" standard is made especially difficult by the fact that the very meaning of the term is uncertain, and that "present value" means different things to different persons. As used in rate regulation, the phrase may refer to either of three very different standards: a) an eclectic or compromise type of rate base, in which a sort of rough average is taken as between the actual and the reproduction cost of the physical property, with certain more or less indefinite additions and subtractions for going value, depreciation and other elements; b) reproduction cost of a substantially identical property, with or without allowances for depreciation, going value and other intangibles; c) reproduction cost of the *service*, on the assumption that this service will be provided by the most modern, new plant rather than by the existing one. Up to the present time at least, it is the first conception which Courts and Commissions have generally applied in a rate case, and this is true of the New York Public Service Commission with respect to the majority of its decisions. Public utility representatives, however, have been more and more

insistent that this compromise rate base should give way to the second standard of "present value," which makes "value" for all intents and purposes synonymous with reproduction cost new of a substantially identical property plus allowances for intangibles; and a good many judicial opinions within recent years have trended distinctly in this direction. The third conception of the "present value" doctrine, which makes the value of the existing plant reflect the cost of reproducing the service by means of a hypothetical modern plant has been frequently urged as the "economically sound" standard by professional economists; but it is objected to by the companies quite as violently as is the "actual cost" standard, and it has as yet received little encouragement from the Courts.

We shall therefore construe the "present value" doctrine as meaning either the compromise doctrine that has hitherto been accepted in most Court and Commissions decisions, or else as meaning a standard synonymous with reproduction cost of a substantially identical plant. The very different "reproduction cost of service" doctrine will be considered later as a possible alternative to the "actual cost" principle, rather than as a mere variation of the "present value" doctrine.

Little time need be wasted in pointing out the absurdities of the compromise, or eclectic method of valuation for rate making. It has so few defenders among all students of the problem that to attack it would be to whip a dead horse. Unless the nature of the compromise is made definite by judicial decisions, "present value" is really not a standard at all, but merely a device for disguising the arbitrary action of a Court or a Commission. On the other hand, if the basis of the compromise were definitely set forth—as, for example, by a judicial holding that "fair value" of the physical property means the precise midway point between actual cost and reproduction cost, then the utter meaninglessness of the compromise would become apparent, and the whole scheme would be recognized as too silly for argument. Certainly no such definite basis of compromise has been put forward by the company representatives as desirable, since they would deny to actual cost any material weight whatever, at least where it happens to be a lower figure than reproduction cost.

Essentially, then, the "present value" standard, as currently interpreted by the Courts, must stand or fall on the assumption that it is not materially different from reproduction cost of a substantially identical property. At all events, these two concepts, "present value" and "reproduction cost," have been so closely related by judicial holdings that the former criterion can be defended only on the assumption that the latter one is basically sound. We believe, however, that not even a plausible defense can be made for this latter standard and that any basis of rate control which even gives weight to reproduction cost of an identical plant, to say nothing of giving "dominant weight," is indefensible.

Cost of Reproducing an Identical Property Lacks Economic Significance

Even if one assumes that the *value of the property,* somehow conceived, is the proper basis of rate control, it by no means follows that cost of reproducing a substantially similar plant even roughly measures that value. This fact must be evident if we take the analogy of any unregulated business property, or of an ordinary commodity used for consumption. The *value* of a dwelling house, for example, is not measured by the cost of producing a replica unless it may be assumed that, were the existing house destroyed, its owner would find it expedient to build another one just like it. Even more striking is the difference between the value of the assets of a growing, progressive business enterprise and their cost of reproduction. These assets, to be sure, may still be in use and giving what would be called "good" service; yet many of them are not giving as good service as could be produced by the most modern type of plant and equipment, constructed in the best possible location and adapted to existing conditions of demand and of industrial technique. An intelligent appraiser, to be sure, might estimate the replacement cost of these properties as a starting point, but in that case he would write down the reproduction costs ruthlessly, perhaps to a mere fraction of the cost new, as a recognition of the fact that obsolescence, inadequacy and physical depreciation have greatly impaired their present worth. This, at least, would be the practice of an appraiser who wishes to secure an honest valuation rather than a bloated statement for purposes of "dressing" the balance sheet.

The very same situation that prevails in the appraisal of industrial property also prevails in a notable degree with public utility property. In the electrical and telephone industries, especially, the progress of the arts has been going on so rapidly that a very large part of the existing plant would never be reproduced even substantially in its present form. If the whole construction had to be done over, *de novo,* power plants and exchanges would be located in different places, to take advantage of cheaper land or more efficient locations, small generating units would be supplanted by large ones, overhead wires changed for underground system, direct current apparatus replaced by alternating current, manual telephone switch-boards would give way completely to machine switchboards, and so on almost without limit. Under conditions of this kind it means *literally nothing,* in a determination of present values, that the present structures would cost fifty millions or a hundred millions to replace, for their replacement is unthinkable.

Persons who object to rate regulation based on the so-called "prudent investment" or "actual cost" doctrine almost invariably insist that this basis is defective because it does not conform to the law of competitive prices. The argument runs that under competitive conditions the price of a commodity or of a service tends to equal what it would now cost to reproduce the product and not what it originally cost the manufacturer to produce the

product. While, for reasons which will be stated later, we believe this doctrine of "competitive prices" to be impractical as a basis of public utility control, we would point out here that it would require just as revolutionary a departure from the existing standard of "present value" as does the doctrine of "prudent investment." For, under the "competitive price" theory, public utility rates should be determined, not by reference to a "reasonable return" on the cost of reproducing the existing plant but rather by reference to the cost at which the service could be supplied under the very different operating costs and very different capital charges that would be incurred by the most up-to-date, substitute plant.

It is keenly to be regretted that so many critics of the "actual cost" basis of rate control completely ignore the world of difference that exists between their own standard of competitive prices and the standard of "present value" as that is currently interpreted and applied by commissions and courts. Counsel for the public utility companies, indeed, have developed an uncanny skill in obscuring this difference. Attention is called, for example, to the articles of Judge William L. Ransom, counsel for the Consolidated Gas Company, who bases his economic defense of the "present value" doctrine on assumptions which hold good only under the standard of cost of reproducing the service,* but who himself insists on a violation of this standard in rate cases by claiming that utility companies, under ordinary conditions, are entitled to earn a fair return on a valuation approximating reproduction cost of a substantially identical plant, with no deductions for depreciation or obsolescence save for those extreme cases of decrepitude where the assets are no longer in useful and active service.

Reproduction Cost As an Alleged Means of Stabilizing the Income of Utility Companies

Although the "competitive price" argument is clearly inapplicable to the standard of reproduction cost of a substantially similar plant, a very different defense of this latter standard is frequently adduced by those who prefer the doctrine of "present value" to the doctrine of "actual cost." According to this view, reproduction cost is superior to actual cost in that it comes closer to stabilizing the corporate income in terms of the purchasing power of money. The great advantage which proponents of the actual cost base claim for their standard of rate control, is that it gives to investors the right of a stable return which does not fluctuate with the capricious changes in the "present value" of public utility property. The benefit of this financial stability, it is contended, will be passed on to the consumers of public utility service, because investors can be induced to contribute their capital at a lower rate of interest than they would demand if their future earnings are subject to wide fluctuations. Recognizing the force of this argument, defenders of the "present value" or "reproduction cost" standard reply that a return which is stabilized in terms of *dollars* is really a very unstable and insecure return, since it does not adjust itself to the changing purchasing power of money. In reality, they argue, a rate base which fluctuates with the changing price level gives greater income stability than does a rate base which is fixed at original cost.

This defense of reproduction cost as a standard of rate control is clearly invalid. It rests on two implied premises, both of which are false: first, that the changing reproduction cost of a public utility property correlates approximately with the changing index in the cost of living; and second, that changes in the income earned by the utility corporation as a whole will correspond approximately with the changes in the interest and dividends payable to individual security holders.

As to the first premise, its falsity will be recognized by anyone who is familiar with the phenomena of price changes in the modern economic world. While there are periods of general trends in prices, during which the prices of most things go up together or down together, there are also very great differences in the extent to which the prices of different commodities and services change. The testimony of the expert economists who appeared before your committee is unanimous and emphatic in this respect. All of these witnesses were agreed that a change in the index of the general cost of living cannot be taken as even an approximate measure of the change in the costs of utility construction. Mr. Olson, vice-president of the American Appraisal Company, submitted charts showing the variations in the costs of typical public utility plants as compared to variations in a general index of wholesale prices.* Taking prices during the year 1913 as represented by the index number, 100, he arrived at the following indices for the year 1929:

Bureau of Labor Index of Wholesale Prices	150
Construction costs of a typical water supply plan	177
Construction cost of a typical electrical plant	180
Construction costs of a typical gas plant	180
Construction costs of a typical telephone plant	190
Construction costs of a typical street railway plant	222

* See, for example, W. L. Ransom, "Some Aspects of the Valuation of Private Property for Public Uses," II, Journal of Land and Public Utility Economics, 1 (January, 1926). On page 9, Judge Ransom says:

"Each such enterprise must be allowed to earn a like return for like service, without discrimination because of any accident or incident as to the date when its property was first constructed and/or installed."

The logic of this argument is that public utility rate should be based on what it would now cost a *new* company to reproduce such service by present-day methods. On the other hand, the so-called "present value" rate base, in so far as it gives controlling or even material weight to the operating expenses and the reproduction cost of the *existing plant*, violates Judge Ransom's principle that no consideration should be given to the "accident or incident as to the date when its property was first constructed." For example, if the rates of the New York Edison Company were to be fixed on the basis of the reproduction cost of its existing plant and equipment, these rates would have to support the high operating expenses and high capital charges which this company is now obliged to incur because of the "accident or incident" that it is still using the highly uneconomical method of distribution by means of direct current. Yet the New York Edison Company, under Judge Ransom's legal guidance, is now insisting upon its right to earn just such high operating expenses and just such a high capital return.

* Minutes, pages 4725, et seq.

It must be remembered, moreover, that the above figures refer simply to changes in the construction costs of new utility plants and not to the changes in the "fair value" of the utility property as a whole. These latter changes may be expected to show even greater divergences from the changes in any general price index, because of the fact that they would be influenced by factors in the valuation, such as land values, going values, depreciation and obolescence deductions which have very little correlation with the fluctuations in wholesale or retail price levels. On this point, also, we refer to Mr. Olson's testimony (Minutes, p. 4739):

> Q. These generalizations [i. e., those that were noted in the above chart] refer to reproduction cost new, do they not? They would not take into account the still greater variations that might take place because some utilities would naturally be subject to a greater degree of depreciation and obsolescence than other utilities?
>
> Mr. Olson: That is not covered by these charts.
>
> Q. In conclusion, Mr. Olson, should you not say this: that if one wants a figure that represents even roughly the variation in the present value of property, one cannot take a general price index such as the United States Bureau of Labor wholesale price index as even an approximate figure for this purpose?
>
> Mr. Olson: That is right.

But even if one might assume that the "present values" of public utility properties will fluctuate approximately in accordance with the changing cost of living, one would still have to recognize that no corresponding changes can take place in the income of the holders of public utility securities unless and until the existing financial structure of both operating companies and holding companies is revolutionized. Very much the larger part of the entire investment in public utility properties is represented by securities bearing a fixed rate of return—bonds, debentures and preferred stocks. Within recent years, indeed, the policy of "trading on a thin equity" has been carried to even greater extreme than ever by the development of the holding companies, which have bought up the common stocks of operating companies and issued against them tremendous amounts of debentures and preferential stocks. In consequence of this peculiar process of financial pyramiding, the yield of much the greater part of the securities cannot be adjusted upward or down in accordance with the changing purchasing power of money. The whole set-up, then, of American public utilities has been so arranged by financiers that the increases of income which may ensue from increments in the rate base or from any other causes, will pile themselves up cumulatively upon the common stock. This explains, in part, the truly surprising rate of dividends, ranging to as high as twenty-five or fifty per cent., or even to several hundred per cent., that have recently been paid on the original investments in some public utility stocks.

It is hardly necessary to point out that unless this vast and complex structure of stratified security issues is pulled down, right to the very ground, no stabilization of income by reference to the changing purchasing power of money can result from the use of a variable rate base. For the fluctuations will go, as they have gone, to multiplying or dividing by many times the income available to junior stockholders, while leaving unchanged the income of senior security holders—unchanged, that is, unless a fall in the rate base becomes so severe as to result in bankruptcy and reorganization.

Fatal Weakness of the Present Value Standard Lies in Its Unpredictability

The great demerit of reproduction cost, or for that matter of any type of rate control which depends on a periodic reappraisal of public utility property, lies in the fact that it necessarily turns public utility securities into speculations rather than investments. This is bound to be the case, because a prospective purchaser of these securities cannot predict with any confidence what income a company will be permitted to earn in any future rate case. In most instances, indeed, he does not even know what return his company would be entitled to earn at the present time, for this knowledge can be secured only in those sporadic instances where a property has just been given an "official" valuation by a Court or Commission. But in any event he cannot know what the permitted earnings will be in five years from now, since he cannot anticipate the many changes, not only in economic conditions but also in the currently accepted methods of appraisal that a particular Commission or Court will adopt. The investor in junior public utility securities is obliged, therefore, to run his risk as to the future action of government, and if he is an intelligent investor he will insist that he be compensated for his risk through the opportunity of making a higher rate of return or of enjoying various incremental values which would not have to be offered him if he were given a greater assurance of a fixed rate of income.

Defenders of a rate base which shifts upward and downward with changing price levels often ask why the investors in public utility securities should be placed in a favored position as compared to the investors in securities of competitive industries. Since the latter groups of investors are not protected against speculative changes in their incomes, why should the former group be singled out for any such protection? The answer to this argument is that the object of minimizing the speculative element in utility securities is not primarily to benefit the investors, but rather to make it possible for the consumers to secure public untility service without paying the high returns on capital which must be paid in order to induce investors to contribute funds to a risky enterprise. This is an object which the Courts, including the United States Supreme Court, constantly recognize since they point out that a public utility company, unlike unregulated business, is not entitled to

large, speculative returns.* But speculative returns are a necessary concomitant of speculative conditions, and the former cannot be avoided without also avoiding the latter.

"Present Value" Standard Has Little Support Among Experts

In taking the position that the "present value" standard, as that standard is generally interpreted, does not constitute an economically sound rate base, we believe that we have the support of a large majority of all non-partisan expert opinion. The fact that there is considerable difference of opinion among experts as to what type of rate control should be substituted should not becloud the highly significant fact that only a very few authorities find the existing system is defensible. President Hadley, for example, in testifying before the committee expressed the opinion that all attempts to regulate rates by reference to a "reasonable" rate of return are unsound.† But he conceded that his criticism holds good of regulation which bases the return on "fair value" no less than of regulation which bases the return on actual investment. His preference for the former standard as the choice of two evils depended, he frankly admitted, on the fact that "fair value" is so flexible and indefinite a concept that it may be made to justify almost any rate of charge which a Court or Commission deems it expedient to allow. In short, the advantage of the "fair value" principle, in President Hadley's opinion, is that it doesn't really work.

The shortcomings of the existing basis of rate control are further evidenced by the fact that the Chairman of the New York Public Service Commission has proposed a very different type of rate base, which he would attempt to apply as a matter of negotiation with the utilities rather than as a matter of law. His proposal, to which the other members of the Commission gave their assent, comes with particular signifiance because of the fact that, unlike the commissioners of Massachusetts and two or three other states, he has been acquiescent rather than insurgent with respect to the traditional methods of control. Chairman Prendergast has been and still is an ardent opponent of any legislative attempt to fix the basis of rate control, which he thinks should be left to administrative discretion, subject to judicial precedents. Nevertheless, even he has found it expedient to propose a rate base which would depart materially from the doctrine of "present value" as now interpreted and which would accept many of the principles of the "prudent investment" rate base.

Among other expert witnesses who referred to the problem of the rate base was Dr. H. Parker Willis.‡ Dr. Willis expressed a preference for a basis of rate control which applies the doctrine of "competitive prices" to public utilities. But he recognized

* See, for example, Bluefield Co. vs. Public Service Commission, 262 U. S., 679, in which the Court said that, while a utility company has a right to earn a return comparable to that earned by companies under similar degree of risk, it "has no constitutionl right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures."

† Hearings, page 1457, et seq.

‡ Hearings, page 5262.

that the principle of "competitive prices" no more conforms to the "present value" standard, when present value is identified with reproduction cost of a substantially identical plant, than it does to the actual cost standard.

Paradox of a Constitutional "Fair Return" Higher Than the Utmost Earnings that Companies Have Been Able to Secure Under Conditions of Great Prosperity

The fact that public utility companies are so glad to continue under the existing system of rate control by reference to "present value" will be easily understood when one realizes that, if their own contentions are to be believed, even the most prosperous electrical utilities today are earning less than the return which they may claim as their constitutional right. In this connection, we attach great significance to the testimony of two representatives of the Consolidated Gas group, Mr. Cortelyou, President of the Consolidated Gas Company, who spoke for the gas utilities associated with the company, and Mr. Sloan, President of the New York Edison Company, who spoke for the affiliated electrical utilities. These combined utilities serving nearly all of New York City, form what is generally regarded as the premier public utility property in the country. They have had a record of great prosperity, enjoy an almost unparalleled credit position in the financial world, and are growing with a rapidity commensurate with the growth of the Nation's largest city. Yet both Mr. Cortelyou and Mr. Sloan testified that their companies have constantly failed to earn the minimum rate of return to which they claim to be constitutionally entitled under the doctrine of "reasonable return on fair value." Not only did they thus testify with respect to past earnings, but they also both expressed it as a policy of the companies for the future not to charge the rates which they were legally entitled to charge but rather to be content with lower rates of charge and the more reasonable rates of returns.

We wonder whether these two executives fully realized what a fatal indictment of the whole theory of the "present value" doctrine they were making when they presented this testimony and expressed this policy. What shall one say of a system of rate regulation which gives to public utility companies the constitutional right, on grounds of protection from actual *confiscation* of their property, to charge higher rates than the Nation's premier gas company and premier electric company find it expedient and necessary to charge in the most prosperous year in public utility history? Let it again be remembered that the "present value doctrine" when first developed by the Courts, was designed to fix the very lowest limit of reasonableness, the constitutional deadline below which a legislature might not go in the exercise of its discretion over railroad or utility rates. Yet here the situation is precisely reversed, and the companies concede that, even without any pressure from the government, and in the exercise of their own business judgment as representatives of the interests of their

stockholders, they find it expedient to charge rates that, by their own contention, constitute a "confiscation" of their property. If this be confiscation, then it is of a kind that stockholders may devoutly pray for.

The fact that even the most prosperous public utility companies are unable to earn what they contend to be a "reasonable return on the fair value" of their property may easily be understood when one considers the gross unfairness of their contentions as to the proper basis of valuation and as to the legal rate of return. These contentions might be brushed aside as of no consequence were it not for the fact that many of them have been urged with such surprising success in recent cases before the Public Service Commission, and before the State and Federal Courts. A thoroughgoing study of this subject is quite out of the question in the present report; but a few of the more significant aspects may be treated here. We shall discuss, therefore, the practice of the Commission and of the Courts in their treatment of (a) obsolescence and depreciation; (b) going value and (c) rate of return.

Depreciation and Obsolescence

In their control of public utility rates, Commissions are required to take account of depreciation (including obsolescence as well as physical decay) in two parts of their calculations: first, in the determination of annual operating expenses, and second in the fixation of a rate base. As to the former item, the Courts have held that a public utility must be permitted to earn a fair return over and above its necessary annual operating costs, and that these costs properly include whatever annual reserves may be required in order to provide for necessary replacements of assets as they wear out or become obsolete or inadequate. As to the latter item, the Courts have also held that the "fair value of the property," on which a company may be allowed to earn a reasonable rate of return, is the *depreciated* value rather than the cost new.

With respect both to the annual provision for depreciation in operating expenses and to the deduction of depreciation in the rate base, opinions differ radically as to what is the desirable policy. On the one extreme are those who insist that both the annual charge for depreciation and the total deduction in the rate base should be determined by what is called the "straight line" method of accrued depreciation, a method whereby the value of each asset is written off in proportion to its estimated lapse of service life. On the other extreme are those who insist that a large, well-maintained public utility property does not depreciate in fact, and that no deductions whatever for accrued depreciation need be made either in the determination of the rate base or in the determination of the charge to operating expenses. Between these two extremes of method there is an almost infinite variety of choices, and each one of these choices has had its own supporters among accountants, rate experts, Commissions and Courts.

There is no occasion in this report to express an opinion on an issue so controversial and so complex as is involved in the choice of a proper depreciation policy. We do, however, express with utmost emphasis our conviction that the treatment accorded to depreciation under the existing regulatory system, both in New York and elsewhere throughout the country, is unsatisfactory in the extreme and grossly unfair to the public. It is unfair because it does not accord with what, in our opinion, is the cardinal requirement in rate regulation—that the same amounts of depreciation which a company is permitted to charge against customers through allowances in the annual operating expenses should also be deducted in favor of customers through reductions in the rate base.

The most extreme instance of unfairness to the public resulting from lack of coordination between annual credits to depreciation reserve and treatment of depreciation in the rate base, has occurred in the case of the New York Telephone Company. We call this situation to public attention because it constitutes, in our opinion, one of the most shocking examples of duplicity and bad sportsmanship that has ever been perpetrated upon the public by any large and reputable public utility company in this country.

Some years ago, Mr. T. N. Vail, who was then president of the American Telephone and Telegraph Company, announced to his stockholders a highly enlightened financial policy for his company and its associated companies, in which he pledged the good faith of the company that it would pay no more than "reasonable" and regular dividends, investing all earnings above this amount in capital improvements which were to redound to the benefit of the consumers and which were not to constitute a claim for a boost in the returns to security holders. As a part and parcel of this policy, Mr. Vail urged the necessity of providing adequately for accruing depreciation, by means of annual charges to depreciation reserve, chargeable as operating costs. These reserves, which he thought should be accrued on what the accountants call the "straight-line basis" (a basis calling for unusually liberal accruals) would be represented by funds that would be put into property extensions. But since the funds were be contributed by the consumers rather than by the stockholders, he recognized that they should not be counted as part of the company's property on which it might later demand the right to earn a return. This latter claim, he conceded, would be unfair because it would require consumers to pay interest on the very money which they had themselves paid over to the company as a contribution to depreciation reserves.

It was very largely on the strength of these assurances by the responsible executives of the American Telephone and Telegraph Company that the various Public Service Commissions, including the New York Commission, permitted the telephone companies in the American Telephone system to adopt an accounting system in which they included an annual allowance for accrued depreciation,

computed on the straight-line basis, in their annual operating costs. This is a completely different system of accounting from that prevailing in the case of electrical and gas companies, which applies the so-called "retirement reserve" system as distinct from the "accrued depreciation system."

Since the death of President Vail, the present management of the American Telephone and Telegraph system has persisted in the use of the "straight-line method" of depreciation as a basis for determining annual charges to operating expenses, and in consequence the telephone companies throughout the country have secured hundreds of millions of dollars of property which have been contributed by the consumers in their payments of telephone service. So far, however, from keeping to the other side of the promise made by President Vail, the telephone companies now deny that these tremendous reserves represent, in any sense, property of the consumers, and they insist on their right to earn a return on the entire "present value" of their property, a value which, they contend, has been subject to only a fraction of the depreciation for which they have provided in their reserves. In this way the American Telephone Company undertakes to secure the inconsistent advantages of making the consumer pay for property on which the stockholders may legally demand a return!

This, we say, is the policy which the American Telephone and Telegraph Company has undertaken to pursue. Quite naturally, the Public Service Commissions of this and other States have not assented to any such blatant imposition, and they have undertaken to meet the issue in various ways, all of which are designed to prevent the company from charging the consumers a return on property which they, themselves, have contributed. The New Jersey Commission attempted to meet the problem by requiring the telephone company to use the excess in the depreciation reserve over the proved depreciation of its property as a basis for the reduction of rates in future years. The New York Commission followed a somewhat different, and we believe a better, plan by insisting that the same amount which the company had set aside as a depreciation reserve should be used as the measure of depreciation in the fixing of the rate base. A dissenting minority on the New York Commission suggested the possible alternative of refusing, in a rate case, to include among the current operating expenses the annual depreciation reserves which, according to the company's own contention, had hitherto proved grossly in excess of the amount necessary to offset any *actual* depreciation in its property values.*

But these attempts by the New Jersey Commission and by our own Commission to prevent the gross injustice of the company's present policy have been countered by appeals to the Courts, and

* We may note that this alternative method of avoiding "double charging" for depreciation, while it would prevent a perpetuation of the evil in the future, would not make good to the public for the excessive reserves that it has already been obliged to pay to the company, and on which the company could still insist on earning a "reasonable" rate of return.

in these appeals the telephone company has insisted that the amounts which it has collected from customers by the accumulation of excessive depreciation reserves is just as truly its private property, and just as clearly entitled to a return as is the property purchased by direct contributions of the security holders. The New Jersey case resulted in a clear-cut victory for the company and a defeat for the Commission. For in that case the United States Supreme Court held that the depreciation reserves represented property of the company, regardless of their source, and that the mere fact that excessive reserves had been accrued in the past did not constitute a ground for the reduction of rates in the future, when this reduction would otherwise have been deemed confiscatory.*

In this State, the New York Telephone case involving the same general issue has not been appealed to the Supreme Court. A Federal statutory Court, however, has sustained the New York Commission in that it has deducted from "cost new" the entire amount of the company's accrued depreciation reserve, in order to arrive at the present "fair value" of the company's property.†

So far, then, the results of the New York Telephone case might seem to give ground for hope that the imposition attempted by the present management of the American Telephone and Telegraph Company will not be tolerated, even under the existing system of regulation. It is by no means certain, however, that matters will adjust themselves properly by Court action without any legislative revision of the traditional method of rate control. In the first place, the recent decision in the New York Telephone case was only a decision of a lower Court, and, even if neither the company nor the Commission should appeal from this decision, the case by no means constitutes binding precedent until the Supreme Court has spoken. In the second place, on a similar, though not a precisely identical issue in New Jersey, the Supreme Court held for the company and against the Commission. In the third place, even the holding of the lower Court in the instant case was a holding, not that the amount of the depreciation reserve is *ipso facto* to be taken as the amount of deductible depreciation in the valuation, but rather that it was *persuasive evidence* of this latter depreciation in the absence of adequate proof that the *actual* depreciation in the property differed from this reserve. In this case the Court held that the company had adduced no adequate proof of this fact. But in view of the very restricted concept of the meaning of "depreciation" which the Supreme Court seems to be leaning toward, we do not feel at all confident of the company's inability to adduce this "adequate proof."

The recent decision of the United States Supreme Court in the Baltimore Street Railroad case‡ simply adds, in our opinion, to

* Public Utilities Commissioners vs. New York Telephone Co., 271 U. S., 23 (1926).

† N. Y. Telephone Co. vs. Prendergast, U. S. District Court, Southern District, New York, No. 7, 1929.

‡ United Railways & Electric Co. vs. West, Supreme Court of the United States, Nos. 55 and 64, October Term, 1929.

the almost insuperable difficulties which the problem of depreciation is creating under the "present value" standard of rate control. That case involved the amount which a Commission must deduct under the heading of "operating expenses" before computing the net income which the company should be permitted to earn. The Commission had included in these operating expenses an item for depreciation designed to amortize the original cost of depreciable property when these assets should be retired. But the Supreme Court upheld the company in its claim for an even larger annual depreciation charge, holding that this annual allowance should be sufficient to permit the company to replace the retired assets at current price levels, and not merely sufficient to allow the company to recoup its much lower original investment in these assets.

The full significance of this holding cannot as yet be predicted with confidence, as it raises far more questions than it settles. We anticipate, however, that the holding, if adhered to in the future, will add even more uncertainty and confusion to a system of rate regulation by judicial precedent which has already become so involved as to be well-night unworkable. If the Courts persist in following, at one and the same time, the doctrine of depreciation *reserves* indicated by this latest decision, and the doctrine of "observed depreciation*" which they have been tending toward in the determination of a rate base, the rift between the reserves collected by the companies from rate-payers and the depreciation imposd upon the companies in a rate base may become wider than ever—even wider than that which the American Telephone Company has attempted to create up to the present time.

* The term, "observed depreciation," which as recently come into such prominence in rate cases, refers to the depreciation that may be ascertained by appraisers through the method of observation of inspection of the property It contrasts with "accrued depreciation," measured by reference to the lapse in the service life of each asset. The argument usually made for "observed depreciation, as an item for deduction in the fixing of the rate base, is that it is based on an ascertainment of "actual facts" as determined by inspection rather than on merely "theoretical" and speculative considerations involved in the estimate of probable service life. The real reason, however, why the observation method is so generally preferred by companies, is that it results in a much lower estimate of depreciation, and hence in a much higher estimate of the "present value" of a property. This is true because of the fact that much of the wear and tear of property cannot be "observed" by the ordinary process of a physical inspection. An excellent illustration of this fact is given by Mr. George O. May of the accounting firm of Price, Waterhouse & Company. Mr. May instances the case of the appraisal of ten thousand electric light bulbs which have been in service for varying periods of time. The "observation" method of determining depreciation would lead to the conclusion that all, or nearly all, of these bulbs are worth their cost new, since an inspection of the lamps would not reveal their lapsed service life. Yet the real value of these bulbs, in the aggregate, would doubtless approximate far more nearly 50 per cent. of their cost new, since on the average they would be about half worn out. In this case the "theoretical" method of measuring depreciation by estimates of lapsed service life would come far closer to stating the actual situation than would the allegedly "practical" inspection method.

Despite the serious objections that can be made to the sole reliance on the "observation" method of inspection, this method seems to have won the sanction of a number of lower Federal Courts. The Supreme Court, in the Indianapolis Water case, used language which has been interpreted as approving it. But the Court in that case merely expressed its disapproval of an estimated depreciation which took no account of the inspection method. It expressly approved estimates which were "based on actual inspection and a consideration of the probable future life as indicated by the conditions found." Up to the present time it is clear that the Supreme Court has left the question of the measurement of depreciation largely an open one. But its practice, one must admit, is to sanction very small depreciation deductions. If it persists in this practice and at the same time permits companies to claim the very large allowances for depreciation reserves which seem to be called for under the holding in the Baltimore Street Railway case, public utility companies may be expected to succeed better than ever before in the game of playing both ends against the middle.

Depreciation Policies of the Gas and Electrical Companies

We have referred to the depreciation policies of the telephone companies because of the fact that the American Telephone and Telegraph Company has been the most brazen in its policy of charging the public for a return on their own contributions to the business. The gas and electrical companies have not dared to attempt such an obvious and flagrant imposition upon the consuming public—an imposition which was made possible only because a too credulous public accepted the assurances of a former President of the American Telephone and Telegraph Company that it would decline to do the very thing which it has undertaken to accomplish under its present management. It should not be inferred, however, that the existing system of regulation is by any means satisfactory even with respect to the gas and electrical companies. Indeed, we do not believe that the system can be made satisfactory unless and until the law is changed so as to require that, in the future, the amount of depreciation to be deducted from the rate base must conform precisely to the amount of depreciation reserve that companies are permitted or required to accrue through annual charges to operating expenses.

At the present time, under the Uniform Accounting Rules adopted by the New York Public Service Commission in 1923, gas and electric companies are not required, or even permitted, to make annual charges to operating expenses designed to set up a reserve for full "accrued depreciation." Instead, they are directed to set up what is called a "retirement reserve" against which to charge all major retirements (as distinguished from minor replacements which may be charged directly to operating expenses, as a maintenance charge). The difference between this "retirement reserve" and an "accrued depreciation reserve" lies in the fact that the former is intended only as a device for equalizing the annual retirement expenses from year to year rather than as a reserve which shall counterbalance the loss in the value of the assets as these assets become worn or obsolete. Practically, this means that the retirement reserve will not normally be nearly as large as an accrued depreciation reserve would be.

Under its present regulations, the Public Service Commission does not itself fix the proper amount of this reserve, nor does it determine the annual retirement charge to the reserve; but, instead, it leaves these matters to the discretion of the company. Indeed, the Commission is of the opinon that, under the present New York State statute, it lacks the power to prescribe these matters, even if it should desire to exercise them.*

Without expressing an opinion as to the relative merits of the "accrued depreciation" system of accounting (whereby a company must set up very large reserves similar to those now set up by the telehone companies) and of the "retirement reserve" system (whereby a company sets up a very much smaller reserve for "equalization" purposes), we believe that the system that now

* Hearings, page 922.

applies to gas and electrical companies in New York State is subject to grave defects. For it permits these companies to charge to operating expenses such annual reserves for retirement as they see fit, at the same time that it makes no definite provision that these reserves must be deducted in the determination of the rate base. In this way it makes possible the very same situation that prevails in the case of the telephone companies, except that the situation is not so critical because the electrical and gas companies are in fact setting up very much smaller reserves, relative to their property investments, than are the telephone companies.

That the danger which we have mentioned is a real one, and that the electrical and gas companies may take advantage of the opportunities which the danger affords, is indicated by the testimony of Mr. Nickerson, Vice-President of the Consolidated Gas Company, and also by the testimony of Mr. Sloan, President of the New York Edison Company. When questioned on the nature of their retirement reserves, both of these officials insisted that the property which has been purchased by means of these reserves belongs to the company just as much as does any of the rest of its property, and they insisted that this property is entitled to a "reasonable rate of return" for the benefit of stockholders, despite the admitted fact that it had been secured by charges to operating expenses—charges which have been paid for by the customers.*

The suggestion has been made that the Pubilc Service Law should be amended, so as to give to the Public Service Commission the authority to specify just how large a retirement reserve any company shall be permitted to accumulate by annual charges to operating expenses. We think that the Commission should, indeed, have the power to require a modification of the charges upwards or downwards whenever it believes that the company has abused its discretion in this respect. But we by no means agree that the real weakness of the existing system of depreciation account can be cured in this way. In our opinion the only feasible solution of the problem lies in a complete change in the present standards of rate control,—a charge which will require a precise correspondence between annual depreciation charges and deductible depreciation in the rate base. This change, however, cannot be accomplished except by a frank departure from the rule of "reasonable return on fair value" that has been developed by the Courts. As long as this rule is applied, the Courts are logically compelled to make a distinction between the amount of depreciation which the companies have *provided against*, through the accrual of a retirement reserve, and the amount of depreciation which the properties have *actually sustained* at the time when the valuation is being made. On the other hand, under the type of "actual cost" doctrine which your committee will propose as a substitute for the "present value" standard, it is entirely feasible to make the depreciation that goes into the rate base correlate exactly with the depreciation that has been provided for by depreciation reserves.

* Hearings, pages 5148, 5590.

Going Value

Not only in the treatment of depreciation but also in the treatment of "going value" the present system of regulation is giving to the public utility companies an opportunity to claim a return on funds which they have collected from their own customers, as a part of their operating expenses. This point can be understood only after a preliminary explanation of the nature of "going value."

The United States Supreme Court has stated on various occasions that the property of a public utility, on which it has a right to earn a "reasonable" rate of return, includes not only its tangible but also its intangible assets. In the case of an established enterprise one of these assets, it is held, is "going value." This value has been defined by the Supreme Court as "the value of an assembled and established plant doing business and earning money, over one not thus advanced."* Following the implications of these statements from the highest Court, most commissions and lower Courts have deemed it necessary to make some allowance for "going value" in the rate base. They have done this, as a rule, by adding to the appraised value of the physical property some percentage, such as 5 or 10% of the "physical value," to represent the value of the established business.

Experts in the theory of valuation have frequently pointed out that "going value," when taken literally as a reflection of the extra *value* of an established property, has no logical place in a rate base. For, as we have already pointed out, the value of a business property depends on its earning power, and one cannot logically take the presumed excess earning power of an established plant as the basis on which to determine how much money this very plant should be permitted to earn in the future. The point has been made, however, that an established public utility company may very properly be given *some* allowance over and above the costs of its physical property, since this allowance is necessary as an offset to the losses which a new business must incur before it fully pays for itself. Under a theory of rate regulation based on the principle of actual cost, the amount of this allowance would depend on the losses, if any, that were historically incurred in getting the business going and that had not yet been made good by subsequent excess income; under a theory of reproduction cost, the allowance would depend, not on the losses historically incurred, but rather on those losses that would probably have to be incurred by a hypothetical new company that was starting business *de novo*. In either case, however, "going value" would not really be a measure of *value*, but rather a measure of "get-going *costs*."

The Courts, unfortunately, have never made the close distinctions between values and costs that are a condition to any satisfactory treatment of the problem of rate control. They have, therefore, never cleared up the obscurity that hangs over that elusive concept, "going value." This lack of any definite and

* Des Moines Gas Co. vs. Des Moines, 238 U. S., 153, 165.

logical treatment of the problem by the Courts is reflected in the hazy conception of the nature of going value expressed by the various members of the New York Public Service Commission. When asked to explain what they understood "going value" to mean, they were obliged simply to repeat the statements made by the Supreme Court, and they were unable to offer the slightest help in solving the fundamental economic difficulty that is implicit in any standard of rate control which uses "value of the property" as a basis of regulation.*

Not only were the members of the New York Commission unable to give any really scientific definition of "going value"; they were equally at a loss to explain how they arrived at the amounts which they actually set down as the "going value" of the property in any particular rate case. A part of the testimony of Chairman Prendergast will illustrate this fact:

> Question (referring to the percentage of going value to physical values): I just can not see why one arrives at 20 or 15 or 10 or 2 per cent. What is the basis that makes one take one figure rather than another?
>
> The Witness: That is judgment only. It is a judgment figure and I claim nothing more for it.
>
> Question: What is the basis of the judgment? Is it just a kind of inner feeling?
>
> The Witness: Yes. It is a kind of inner feeling supported or supplemented, I might say, by what has become the practice almost throughout the country.
>
> Question: There is sort of a tendency towards a more or less arbitrary crystallization at percentages like 10 or 12?
>
> The Witness: Yes.

We think it hardly necessary to state that a valuation policy so arbitrary, so lacking in objective standards, and so unsupported by economic principles as has been the policy of the New York Commission relative to "going value" is utterly indefensible and subversive of the whole scheme of effective regulation. Yet our criticism is not so much of the action of the Commission as it is of the legal system under which the Commission has been operating, and under which it must continue to operate as long as the criteria of fair rates are left to judicial decision rather than to legislative standards. The only serious blame which, we feel, should attach to the Commission is that it has not called public attention to the absurdities of the system of regulation under which it has been compelled to work.

The Public Service Commissioners have constantly insisted, at the hearings of this committee, that "going value" will not be allowed as a matter of course, but that the burden of proof of its existence must be assumed by the company. But how can going value be "proved," and how can a contesting city or group of consumers adduce rebutting evidence, when the very concept

* Hearings, pages 748, 1179, 3580.

of going value, let alone the method of which it is to be measured, remains a judicial secret? To adduce proof or disproof of a thing that has no more definite meaning than "going value," as used in a rate case, is simply to go through a process of mumbo jumbo. The result of this process, of course, is to give to the Commission arbitrary discretion to allow as much or as little to the companies as they choose to allow for any reasons which they may deem expedient, subject only to the superior arbitrary discretion of a reviewing Court to allow a different sum. We wonder that intelligent and reasonable men are able to acquiesce in any such policy without protesting its absurdity!

But the indefinite nature of the concept of going value, and the arbitrary, meaningless percentages which are so solemnly "found" by the Commission as an expression of this value do not constitute by any means the sole objection to the present practice. A more positive objection is to be found in the fact that an allowance for going value, based on a percentage of the costs of the physical property, must result in giving to the companies the right to charge the public twice for the same thing. As we have already pointed out, the only plausible ground on which a company may claim a right to an allowance for "going value" is to be found in the argument that public utility properties, then first erected, do not at once yield a reasonable return over and above operating expenses. There is a developmental period during which a sufficient number of customers must be secured, and during this period the company may be unable to secure a fair return.

If the situation which has just been assumed, and which must be assumed in order to justify an allowance for "going value," were typically true of present day conditions, it would indeed justify some sort of an allowance which would permit the company to make good its past losses. Such a condition, however, is not typical of public utility properties today, and it is notably false with respect to the very companies that are able to claim the largest "going values," namely the highly prosperous companies that can prove a high value for their established business. This is true because only in rare cases is a public utility company started as a completely new enterprise today. Almost without exception, the capital investments that now go into public utility properties are in the nature of additions and extensions. From the very moment when these extensions and additions are put into service, a public utility company is permitted to add the extra capital costs to its fixed capital account, and this augmented capital becomes the amount on which the company has a right to earn a "reasonable rate of return."* To be sure, there may be

*Attention is called to the fact that the New York Telephone Company, in the rate case which is now pending before the Public Service Commission, has insisted on adding to the rate base fixed by the Federal Statutory Court for July 1, 1928, an additional amount designed to cover by *anticipation* the capital expenditures which it has not yet made but expects to make during the first half of the current year. Yet this same company, which claims the right to adjust rates so as to prevent any temporary deficit below a fair return on its new capital investments, has been given by the Statutory Court an allowance of ten million dollars for "going value."

a short period before the new extensions, taken by themselves, will be able to earn an adequate return, since new business cannot be developed over night. But it should not be forgotten that the company is generally given a right to earn an adequate return, not on each specific piece of its plant, but rather on its property as a whole. Consequently, when a prosperous company like the New York Edison Company, or the Long Island Lighting Company, or the New York Telephone Company expands (as it does all the time, for expansion is a continuous process), it may charge such rates as to secure *from the very outset,* an adequate return on its entire investment. The hypothetical "waiting period," the period of "lean years," during which a company is supposed to submit to an inadequate return, and which is supposed to justify a compensating allowance, in the form of a "going value," simply does not exist in most cases. And yet, as we have pointed out, it is precisely in those cases where the "waiting period" does not exist that a company may establish the largest claim for going value, since it is the prosperous company which has no lean years.

Surely the injustice of a system of regulation which permits a company to earn a full return on its new capital as fast as that capital goes into public service, but which nevertheless permits the company to claim an unearned increment called "going value," which increases as the property investment increases, must be obvious to anyone whose point of view is not hopelessly biased. The injustice has been recognized by Commissioner Pooley of the New York Public Service Commission, as may be seen from his testimony before our committee, from which we quote (Minutes, pp. 3580, 3581):

> Q. Would you want to discuss going value at this point? A. Well, going value has been defined by the Courts to mean that element of value which a plant with business attached has over a plant of the same kind, in the same situation, with no business. Now, no definite rule that I ever heard of has ever been laid down with which to measure going value. I don't mind saying personally that I have not much faith in it. I do not like the rule. I think it is just Court-made law. But in the early stages of the establishment of the business, there are certain expenses which the utility necessarily incurs in addition to what goes into labor and material. Those expenses that are not represented by physical assets, constitute just as great an investment, just as much of an investment to the investors, as the physical assets. I think that should be allowed. I think the failure to get a plant going to capacity for a very short period at the inception, should be allowed. Outside of that I would not allow anything personally. Now, at the present time going value is based on just a few considerations: First, the cost of attaching the business, the cost of tuning up the plant, the cost of training an efficient staff. Now, all of those elements, of course, under the uniform system of accounts in this state, are paid for out of operating expenses, and personally, I think the corporation should be estopped from claiming them as going value. That is my own opinion. It may not be the law.

With going value, no less than with depreciation, it is far easier to see the injustice of the prevailing system of rate control than it is to suggest the remedy. The critic of the New York Public Service Commission may say that this Commission should either refuse to sanction a claim for "going value" or else refuse to permit a company to earn a full return on its new capital investments until a sufficient period of time has elapsed so as to make the deficit in this part of the return correspond to the increment that the company may claim under the head of "going value." Yet one must recognize, in fairness to the Commission, that either of these two positions might very possibly meet with reversal in a reviewing Court. Again we come back to our conclusion that the fundamental evil lies in the underlying system of rate control which the Courts have developed under the doctrine of "reasonable return on fair value." The statement which has just been quoted by Commissioner Pooley, to the effect that he does not like the rule about going value but nevertheless feels that the Commission's hands are tied by the Courts, deserves to receive full and sympathetic consideration by anyone who feels that the fault lies with the personnel of the present Commission rather than with the system under which the Commission has been obliged to work.

We believe, nevertheless, that the New York Commission cannot fairly be relieved of all criticism for a situation so clearly unfair to the public. In the first place, it has been far too ready to buy peace with the companies by acquiescing in their claims for going value when these claims might very possibly be disallowed if appealed to the highest Courts. And in the second place, it has made no serious effort to bring to the attention either of the public or of the Courts the gross injustices which are resulting from the policy which it believes itself under legal pressure to follow. Even the force of Commissioner Pooley's mild protest before our committee is almost nullified because of his far more insistent statement that, on the whole, regulation in New York, under the existing legal rules, has "been more effective even than was to have been expected" when the Public Service Commissions Law was originally enacted.*

Rate of Return

We have referred in the preceding paragraphs to factors in the valuation of public service properties which in our opinion have tended to make regulation ineffective as a means of enforcing reasonable rates of charge. The injustice of these valuation methods is magnified, however, by the allowance of rates of return

* Hearings, page 3524.

which can hardly be justified by any objective analysis of current credit conditions of the public utility enterprises in particular or the state of the money market in general.

What constitutes a "reasonable" rate of return? On grounds of practical economic policy one might suppose that "reasonable" rate is one that is sufficient to attract the capital necessary to supply the community's needs for public service. This, in fact, is the point of view suggested by many Court and Commissions opinions, although it must be admitted that these opinions are often indefinite or ambiguous. Perhaps the most pertinent statement from the United States Supreme Court is the following, which has frequently been quoted by the New York Commission and by other Commissions.

> "What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.
>
> "Investors take into account the result of past operations, especially in recent years, when determining the terms upon which they will invest in such an undertaking. Low, uncertain or irregular income makes for low prices for the securities of the utility and higher rates of interest to be demanded by investors. The fact that the company may not insist as a matter of constitutional right that past losses be made up by rates to be applied in the present and future tends to weaken credit, and the fact that the utility is protected against being compelled to serve for confiscatory rates tends to support it. In this case the record shows that the rate of return has been low through a long period up to the time of the inquiry by the Commission here involved."*

* Bluefield Co. vs. Public Service Commission, 262 U. S., 679, 692-695 (1923).

In a more recent opinion,* the Supreme Court quotes the above passage from the Bluefield case and adds the following:

> "What will constitute a fair return in a given case is not capable of exact mathematical demonstration. It is a matter more or less of approximation about which conclusions may differ. The Court in the discharge of its constitutional duty on the issue of confiscation must determine the amount to the best of its ability in the exercise of a fair, enlightened and 'independent judgment as to both law and facts.'"

Despite the oft-repeated statements of the Supreme Court and other Courts that the rate of return must be adjusted to the particular facts of each case, Commissions and lower Courts have generally paid little more than lip service to this declaration of policy. In actual practice they have usually fixed upon some *conventional* rate of return, such as 7 or 8 per cent., and they have applied it to the vast majority of public utilities, departing from the standard rate only in those extreme instances where this rate has been obviously inapplicable. In this respect they have tended to follow the precedents set by the statutes of various States fixing a single "legal" rate of interest. As a rule, however, the arbitrary nature of the rate of return has not been openly conceded in the opinion of the Court or Commission. On the contrary, the opinion is more likely to leave the reader with the inference that the accepted rate has been arrived at by the exercise of judgment on the facts of the particular case as supported by evidence adduced in the record.

What has been said above as to the general tendency of Courts and Commissions to standardize the rate of return at a percentage having little or no economic significance, is true notably of the New York Public Service Commission. At the hearings, to be sure, various Commissioners laid stress on the supposedly flexible practice of the Commission in adjusting the rates of return to the particular type of enterprise and to the particular period of time to which each case applies. Without in any way doubting the sincerity of these expressions of opinion, we believe that an actual analysis of the Commission's decided cases will show that the supposed flexibility of the rate of return has been largely illusory.

We may refer, in this connection, to a memorandum submitted to our Commission by the Public Service Commission, entitled, "Digest of Reported Rate Proceedings As to Rate of Return Permitted by Public Service Commission, January, 1916, to November, 1929."† According to this memorandum, the present Public Service Commission has had forty-two cases in which it has fixed a "reasonable" rate of return. These cases were decided during a period from April, 1921, to November, 1926. In thirty cases the rate was fixed at 8 per cent.; in three cases it was fixed at 7 per cent. plus; in six cases at 7 per cent.; in two cases at 6 per cent. plus;

* United Railways & Electric Co. vs. West, ... U. S., ... January 6, 1930.
† Hearings, page 5803-5816.

and in one case at 6 per cent. Arranged in accordance with different types of utility enterprise the figures are as follows:

	Number of Cases				
Type of Company	8%	7% Plus	7%	6% Plus	6%
Electric property	11	1			1
Gas property	10	2	2		1
Natural Gas Property	4				
Telephone property	2		2		
Street Railway Property	3		2	2	

It is apparent from these figures that 8% has been accepted as the *standard* rate of return. A very important exception is that of the New York Telephone Company, where the Commission has held on two different occasions that 7% was an adequate rate of return in view of the excellent credit position of a telephone property of that nature. Even in this case, however, Chairman Prendergast and Commissioner Van Namee dissented, as they contended that 8% should have been allowed. With electric companies eight per cent. has been the almost invariable rate of return. A lower rate for electric railway properties may seem surprising in view of the fact that the cost of securing capital is doubtless greater for this struggling type of industry than for gas and electric properties. We are informed that the relatively low rates allowed in certain of these cases were adopted because the Commission recognized that the traffic would not bear the high rate of fare necessary in order to yield an eight per cent. return. As to the gas companies, the departures from the standardized allowance of eight per cent. seem to have been due to special circumstances, notably to the fact that in certain instances the property was overdeveloped relative to existing demand for the service.*

In accepting eight per cent. as a standard rate of return for most public utility properties, the present Public Service Commission has merely followed a precedent set by the earlier "Second District" Commission, which it superseded. Out of thirty-three cases during the period from January, 1916, to April, 1921, twenty-four of them fixed rates of eight per cent., three at more than eight per cent. (all of these being natural gas cases) and six at seven per cent. or seven per cent. and a fraction. On the other hand, the old "First District Commission," in the four cases noted in the memorandum submitted to the Public Service Commission to our committee, adopted seven per cent. each time (three gas cases and one electric case).

It is hardly necessary for us to call attention to the fact that a rate of return of eight per cent., prevailing from 1916 down to 1926, and applied to companies and enterprises of a wide diversity of credit, can only be defended on the assumption that a relatively fixed, conventional rate of return should be applied under the doctrine of "reasonable return on the fair value" of the property. If this defense is a sound one, then the real situation should

* This seems to have been the main ground for the allowance of only 7% in two cases: Gas Rates, Town North Hempstead, etc., 1923 Rep., N. Y. P. S. C., 256, 262; Freeport vs. Nassau & Suffolk Ltg. Co., ibid., 265, 273. In another gas case, where a return of only 6% was allowed, the company itself did not ask for a higher rate: Rochester Gas & Elec. Corp., 1924 Rep., N. Y. P. S. C., 115, 117.

be stated by Courts and commissions with much more frankness than has been characteristic in the past, and the popular illusion that rates of return are adjusted so as to conform to the particular circumstances of each individual case and to the changing conditions of the money market should be dispelled.

We are convinced, however, that the New York Commission has failed to make the careful study of the problem of the rate of return which the importance of the question really requires, and we strongly suspect that it has yielded too easily to the temptation of falling back upon judicial dicta and lower Court decisions in support of almost meaningless, conventionalized rates. We are even more firmly convinced that the particular rate of eight per cent. that the Commission has generally adopted, and to which it has adhered in all electrical cases but one, could not be defended under existing conditions of the money market. It is not to be denied that a formidable array of lower Court decisions can be adduced in favor of this rate, as applied to gas and electric companies; and some of these cases involve litigation in which the Public Service Commission of this State was itself involved. But it should be remembered that the more recent tendency of Courts to approve an eight per cent. rate of return was distinctly the result of a period of unusual poor credit conditions for the utilities immediately following the World War. Since that time public utility credit has improved remarkably, and in consequence the rate at which it is now possible to attract capital is materially lower than the rates that prevailed when the eight per cent. return was so persuasively urged upon the Courts by the companies.

Our fears that the New York Commission has sometimes been too ready to accept defeat in the Courts before that defeat has actually been suffered are strengthened by the recent decision of the statutory Federal Court in the New York Telephone Case.* In that case the majority of the Commission adopted a 7 per cent rate of return instead of the 8 per cent. rate which it has generally applied to gas and electric companies. It did so, however, over the vigorous protest of Chairman Prendergast and Commissioner Van Namee, who stated in their dissenting opinion that the more recent judicial decisions has sanctioned an 8 per cent, rate under present economic conditions. In taking this position, the two dissenting commissioners expressed themselves as bound by the very cases which even the majority of the Commission had considered persuasive in previous electrical cases.† Yet the Federal Statutory Court has just sustained the seven per cent. rate of return in this case and has not regarded the preceding Court decisions as constituting binding precedent for the higher rate. What the Supreme Court may say on this point is, of course, a matter for conjecture unless and until the case is appealed. But up to the present time this highest Court has never held that a rate as high as eight per cent. is required with

* Supra, page 40, note 2.
† See, for example, Plattsburgh vs. Plattsburgh Gas & Electric Company, 1926 Rep., N. Y. P. S. C., 292.

respect to any public utility enjoying a reasonable degree of prosperity.*

In expressing our opinion that the New York Commission has too readily assumed that an eight per cent. is required "as a matter of law" we are well aware that there may be circumstances under which a rate higher than the constitutional minimum might well be permitted in the public interest. We believe, however, that under present economical conditions, and under the existing legal rules as to the determination of "fair value," the *very lowest* rates of charge which a Court would uphold as constitutional error on the side of extreme liberality to the companies. Certainly no other conclusions can be drawn from the testimony of the representatives of the Consolidated Gas Company, of the New York Edison Company, and of the New York Telephone Company, all of whom stated that it would not be the policy of their companies to charge all that they were legally entitled to charge under the rule of "fair value."

On this point one should not overlook the fact that what is a "reasonable rate of return" must depend very largely on the particular form of rate base to which this rate is applicable. Under existing law, the rate base that is adopted is one which has expanded out of all proportion to the capital contributions made by the security holders. At eight per cent, return on "fair values" means, therefore, far more than an eight per cent. return on investment. It includes, for example, a return on a "going value" which, under the rulings of Courts and Commissions tend to increase proportionately with the growth of capital investment and with the increasing prosperity of the established business. It is also likely to include a return on property which has been paid for by customers themselves, by virtue of contributions to depreciation or retirement reserves in excess of the depreciation deductible in the rate base. And it almost invariably includes a return on expanding land values, an item of great importance in the valuation of properties located in large cities. These and other similar factors should be given full consideration by any Commission before it decides to resolve doubtful matters of law in favor of the companies and to uphold a rate of return higher than has ever been required, for properties of the character in question, by the highest Court of the land. Yet so far as we can gather from the testimony of the commissioners and from a reading of the published opinions of the

* In the very recent Baltimore Street Railroad case (supra, p. 41, note 1), decided while our committee has been sitting, the Supreme Court upheld the the company's contention for a rate of 7.45% and rejected a rate of 6.26% with respect to a street railway property; and it even intimated that a rate as high as 8% might be necessary to avoid confiscation. In justifying its holding, the Court adverted to the poor credit conditions of the street railway enterprise and mentioned specifically the fact that the company in question had been unable to sell bonds except at a yield of over 7%. The only support which this case gives for the contention that 8% has become a standardized rate of return, applicable to all companies despite variations in their credit conditions, comes from the fact that the prevailing opinion cites indiscriminately a series of lower Court decisions with respect to gas and electric companies which sustained a rate of 8%. This casual reference to recent cases, however, does not even constitute a clear *dictum* for the view that 8% is required in all cases,—especially so since an acceptance of such a positive view would directly controvert the Court's statement that the proper rate of return depends on the relative degree of risk which investors must incure when they invest in the type of enterprise under consideration.

Commission, such factors have been given very little attention. Certainly they have not been given the careful scientific study that their public importance deserves.

In one respect the present Public Service Commission Law must perhaps share a part of the criticism which, in our opinion, properly attaches to the use of the eight per cent. rate of return as the standard rate. We refer to the italicized part of the following passage in the present Law (Sec. 72):

> In determining the price to be charged for gas or electricity the commission may consider all facts which in its judgment have any bearing upon a proper determination of the question although not set forth in the complaint and not within the allegations contained therein, with due regard among other things to a reasonable average return upon capital actually expended and *to the necessity of making reservations out of income for surplus and contingencies.*

In testifying before our committee, the Chairman of the Public Service Commission has stated that this clause of the statute has been taken into account in the determination of the "reasonable" rate of return, and that it has lead the Commission to fix rates which might otherwise seem unnecessarily high. In view of our belief that, under existing standards of valuation, the very lowest constitutional rate of return is unduly liberal in a large number of cases, we believe that this section of the law should be repealed, even irrespective of the more fundamental amendment to the basis of rate control which we recommend. It may well be, as the Chairman of the Commission has suggested, that the Courts would interpret such a provision in the act as merely declaratory of the general "law of the land," which would be enforced irrespective of statutory sanction. In any case, however, we believe that the psychological effect of this clause is unfortunate, as it encourages the Commission to resolve doubtful questions of constitutionality in favor of the higher rate of return.

In recommending the repeal to the above-mentioned clause, we fully recognize that a financially sound basis of rate control should permit a public utility company to earn a safe margin over and above the amounts required for fixed charges and for reasonable and regular dividends. Indeed, it is a canon of sound finance that a company should not pay out all of its earnings in dividends and that it should ordinarily build up an adequate surplus, by reinvestment of excess earnings, so that the payment of regular dividends in the future can be reasonably assured even during periods of business deression. In the new system of rate regulation which we are proposing, provision is expressly made for this highly desirable financial practice. But one of the most serious defects of the existing scheme of control lies in the fact that it precludes a commission from permitting companies to set aside liberal surplus earnings as a reserve for future financial security, except on terms which are clearly unfair to the public.

We may illustrate this situation by assuming a hypothetical case of a public utility which desires to maintain regular dividends of eight per cent on its common stock. These dividends, let us assume, have been approved as "reasonable" by a Public Service Commission. Let us assume, also, that the company must be permitted to earn twelve per cent. on its common stock in order to build up the reserves and the earning power necessary to give confident assurance that the eight per cent. dividends can be regularly paid. Under existing Public Service Law, if the Commission sanctions rates of charge sufficient to yield 12% earnings on the common stock, and if the company reinvests the 4% balance in the property (with the appropriate credit to surplus, or to reserves, or to no matter what other account), then the company has the legal right to earn a return on these reinvested funds, just as it does on funds contributed directly by the stockholders.

The outcome of this situation is that a reserve designed by the Commission simply as a means of safeguarding the existing *eight per cent.* dividend may be and will be used by the company, sooner or later, to justify a still higher rate of dividend. This process will will go on indefinitely and will work cumulatively—for the higher the new "reasonable" rate of dividends to which the company is entitled as its investment expands, the larger becomes the amount of excess earnings required in order to give an ample margin of safety for these dividends. The unfairness of this process of financial snowball rolling is not lessened, but only emphasized, by the fact that public utility companies are alert to increase their outstanding security issues at least as fast as their capital assets increase, thus maintaining the appearance of a very modest, stabilized dividend on each share of the outstanding stock.*

We may conclude this discussion of the rate of return by saying that, while we feel that the Commission has been unduly liberal toward the public utility companies in view of all existing circumstances, we also feel that the primary difficulty lies, not with the administration of the existing law by the Commission but rather with the present standards of rate control that have been developed by the Courts in the absence of effective legislation. One of the fundamental difficulties of this present system has already been mentioned—namely, its failure to distinguish between earnings that may properly be paid out in dividends and interest, and earnings that should be used only as a reserve to safeguard existing interest and dividends. Another serious defect lies in its failure to distinguish between the *different* rates of return that should be allowed on different capital contributions, depending on the time when they are made. On this point we shall have more to say when we discuss our proposed bill to revise the basis of rate contract.

* By the use of the holding company, untility financers have been able to increase the security issues outstanding in the hands of the public at an *even greater* rate than their capital assets have increased. See, for example, the application of the Long Island Capital Corporation, mentioned elsewhere in our reports, which involves a plan of a holding company to issue its stock in exchange for the common stock of the Long Island Lighting Company, and then to purchase further issues of this latter stock by the issuance of its own senior securities.

Section 2. Possible Substitute Methods of Rate Control

Although impartial authorities are almost universally agreed that the system of rate control which prevails at present, under the rulings of the Courts, is a seriously defective one, there is much less uniformity of opinion as to what system should be accepted in its place. In advocating a modified form of the "actual cost" basis of regulation, we believe that we have the support of the majority of the economic experts who have studied the problem. Yet a very significant number of authorities take a different view, and their alternative suggestions have been carefully considered. The two most plausible proposals, outside of governmental ownership and operation, are: first, the adoption of the standard of rate control known as "cost of reproducing the service," and second, the adoption of a system which may be called the "principle of maximum profits." Our reasons for rejecting each of these substitute plans will now be briefly considered.

Cost of Reproducing the Service As a Basis of Rate Control

We have already pointed out that the existing system of rate control, under the so-called "present value" doctrine, is really an arbitrary and meaningless compromise between the use of actual cost and the use of reproduction cost as a basis on which to calculate the fair rate of return. We have also noted that within recent years, the Courts have been tending more and more to minimize the importance of actual cost and to emphasize the importance of reproduction cost as a "dominant" factor in the rate base. By "reproduction cost," however, the Courts have generally meant the cost of reproducing a substantially identical property, with nothing but very minor deductions for the grosser forms of depreciation and obsolescence.

Certain students of public utility regulation who object on economic grounds to the "actual cost" basis of rate control have insisted that if the Courts would only follow out the real logic of the "present value" doctrine, they would arrive at the standard of cost of *reproducing the service* and would reject the unsound standard of a reasonable return on cost of reproducing a substantially identical plant. For, if the *present value* of the property is to govern the rates, and if historical cost of that property is to be rejected, then it would logically follow that the *historical* conditions of construction and of engineering technique which led to the erection of the old type of plant should also be ruled out completely. The real test of a "fair" rate of charge would then become the cost that a new enterprise, starting out afresh with new capital, new management, and new plant and equipment, would have to incur in order to furnish equally good service. In determining these hypothetical costs of producing the service, a commission or Court would disregard completely not only the reproduction cost but also the operating expenses of the existing plant, except that it might use both of these data as partial evidence of the operating costs and capital costs that the new company

would have to incur. Since, however, the new property would probably be of a very different nature from the old, not only its construction costs but its operating costs would doubtless differ materially from the costs of the established concern. A Commission should, therefore, make an estimate of these differences in determining the rate of charge which the present company might be permitted to impose.

As we have already indicated in discussing the existing system of rate control, we believe that the cost of reproducing the service is the only kind of reproduction cost that has even a plausible basis of defense in economic theory. Indeed, were it not for the very serious practical and legal difficulties of enforcing such a standard, we should be compelled to give it very close consideration, as it has certain distinct advantages over any alternative basis of regulation. The practical difficulties of enforcing it, together with the financial uncertainties to which its adoption would give rise, are so formidable that we do not recommend that this system of rate regulation be attempted.

The first objection to the adoption of this standard lies in the extreme difficulty of estimating what it would cost for an entirely different, hypothetical new plant to produce the service. Suppose, for example, that a commission were called upon to fix the charges for electricity in New York City. It would have to determine where the power plants could be most economically located, what kind of generating units would be installed, what transmission and distribution systems would be adopted. Then it would have to estimate the capital costs of construction of this entirely new system of generation and distribution. On this estimated capital cost it would have to estimate a rate of return necessary to attract, within some assumed period, the required amount of capital into that new and "unseasoned" enterprise. It would then need to estimate the probable operating expenses of the system, taking into account on the one hand all the economies that would result from the use of larger generating units, better located power plants, alternating current, 60 cycle equipment (as against the large amount of direct current or 25 cycle equipment now being used by the present company), and taking into account on the other hand the lack of experience of the operating and executive staffs, the large initial expenditures necessary to develop the business and to "break in" the new equipment. Does anyone really suppose that a Commission could and would really do any such thing? Is it not almost a certainty that the doctrine of "cost of reproducing the service" would revert eventually to the existing, meaningless doctrine of cost of reproducing a substantially identical plant? We believe that such an outcome is inevitable.

But even if one may assume that these practical difficulties can be measurably overcome, and that the service of engineering appraisal would make it possible for a Commission to fix approximately the price at which a new company, operating with an entirely different plant and equipment, could furnish electrical

service, there would still be a serious question whether the application of any such standard would be financially feasible. In a rapidly developing industry like the electrical industry or the telephone industry, great improvements are taking place almost overnight. As a result, plants built as little as five or six years ago are today obsolescent. Under the system of cost of reproducing the service an existing company would be required to write off immediately the fall in value of its own property that is occasioned from the discovery or invention of a new process or type of equipment. From the moment that a new invention makes it possible for the "hypothetical new plant" to produce the service more efficiently, from that very moment the existing plant would be compelled to reduce its charges in consequence.

We have very grave doubts whether a system of regulation that actually carried into effect the doctrine of cost of reproducing the service would make it possible for utility companies to raise the hundreds of millions of dollars per year that they need to raise in order to serve the public. The risks would be too great, and capital would seek investment elsewhere. It is often said, to be sure, that similar risks prevail in unregulated enterprise, where competition is supposed to compel manufacturers constantly to scrap obsolete property and to write down the values of obsolescent property, in order to keep abreast of their newer and more up-to-date competi tion. They have been able to do this, however, only because of their ability to earn very high, speculative profits during periods of prosperity—profits so large that they furnish a temendous reserve against rapid obsolescence. Doubtless, many public utility companies could do the same thing if they were given the right to accrue the necessary surplus and reserves during periods of good business. But one can readily see how impractical it would be for commissions to allow them just enough but not too much reserve for this purpose. As a financial matter a commission would find it necessary to play safe and to allow reserves which *probably* will prove excessive. Yet, if this were done, it would give to the fortunate utilities great, unnecessary reserves which would go to the extension of the property and on which they would have the right to claim additional returns.

There is still another reason why the doctrine of "reproduction cost of service," often called the "law of competitive prices," is not feasible for utility companies. The "law of competitive prices" is a very ruthless law. It makes princes out of fortunate or well managed companies; but it makes paupers out of unlucky or poorly managed companies. As a result, a large fraction of competitive business goes bankrupt. If the same principle of competitive prices were applied to public utility companies, through the adoption of the standard of "cost of reproducing the service," many public utilities would fail and have to be reorganized. Almost invariably, however, a considerable period elapses before a public utility that gets into financial difficulty goes into receivership and is reorganized. Meanwhile, the service becomes poor, the company fails to

make necessary improvements and extensions, and the public becomes the greatest sufferer. With competitive business, the public may protect itself from the poor service of a bankrupt enterprise by going to its more fortunate rival. But with public utilities no such option presents itself. Hence, the failure of a public utility company is a public and not merely a private calamity.

President Hadley's Proposal to Base Rates on the Principle of Maximum Profits

In striking contrast with all other proposals for a system of rate regulation is a plan ably defended at our Hearings by President A. T. Hadley, who testified as an economic expert. President Hadley expressed the belief that any attempt by government to limit public utility rates on the basis of a reasonable return is economically unsound irrespective of the question whether the return is to be computed on the so-called "present value" of the property or on actual cost. If a choice must necessarily be made between the present value doctrine and the actual cost doctrine, he would prefer the former, but only because he recognizes that the standard of present value or the associated standard of reproduction cost is so highly indefinite that it permits the Commission to exercise its own discretion, and thereby defeats its own supposed object.

In place of the principle of a reasonable return, President Hadley proposes what he has called the Fink-Adams plan, a plan which he says, was supported by Messrs. Fink and Adams during the nineteenth century as a proper basis of railroad rate control. According to this plan, the initiative of rate making should be left largely to the company management, which would fix rates on the principle of "charging what the traffic will bear." Quite naturally the management will attempt to fix rates in such a way as to secure the highest rate of profits for the company, but this policy President Hadley believes to be in the interest of the public no less than in the interest of the stockholders. Interference by a Commission is justified only when the company management is so unintelligent or so shortsighted as not to realize that the largest profits can be made only by a vigorous policy of rate reductions rather than by a policy of high charges.

The position taken by President Hadley, which is based on the assumption of a substantial identity of interest between the consumers and the stockholders, is in direct conflict with the generally accepted view that public utilities are essentially monopolies and that their charges, if left unregulated, will tend to approach a high monopoly price rather than a low competitive price. Supporters of the Hadley doctrine insist that public utilities are only in a very limited sense monopolistic. Really, it is argued, they are doing a highly competitive business. This is obviously true with respect to the electric power companies so far as concerns the serving of large power users. But it is even true, they assert, with respect to domestic lighting consumers. For there is the alternative of gas light if the electric current is too expensive.

Far more important, there is what is called a "competition of alternative demands," by which is meant the opportunity that the consumers have of spending less on electric light and more on other comforts or luxuries if the electric company charges too much for illumination. This alternative which consumers enjoy of purchasing other things is supposed to create a demand so highly elastic that public utilities, if they are governed by enlightened self-interest, will not care to charge more than a reasonable price, on pain of losing the business.

The great merit claimed for this essentially *laissez faire* policy is that it will not curb the initiative of private management in extending and cheapening the service by improved construction and operating technique. By removing the restrictions to a mere "reasonable" rate of return, it permits the highly efficient manager to earn more than the mediocre manager, and thus encourages the former type while discouraging the latter. Moreover, it prevents the constant and time consuming conflicts between the regulating Commission and the company and tends to make them partners, rather than opponents, in the simultaneous effort of serving the public and of making more money for the stockholders.

While recognizing the plausibility of this argument for the use of maximum profits as the criterion of rate making, we believe that it is based on an economic theory that cannot be substantiated. It is doubtless true that competition by the use of substitute or alternative services does fix an upper limit of prices above which a public utility, in its own pecuniary self-interest, cannot go in fixing rates. Such competition, however, is by no means of a type which can be relied upon, under the well-known law of competitive prices, to regulate rates at the minimum point necessary to attract capital and to get the business done. The only kind of competition which can do this is competition in which the competitors are on equal footing with respect to the kind of service which they supply and with respect to the costs of production which they must incur in order to deliver the product. It is simply absurd to assume that this situation is true as between gas and electric service, or as between street railway and telephone service, or even as between the use of an isolated plant by the owner of a moderate-sized building and the use of power-company services. All of these factors, to be sure, operate to prevent a company from charging as much as it would otherwise be disposed to charge; they do not operate to prevent it from charging any more than it needs to charge in order to perform the service and to attract necessary capital for extensions and improvements.

It is not to be denied that there are *some types* of service which public utilities must furnish under conditions of a strictly competitive market. This is notably true for electricity supplied to large industrial power users, since such industries can produce electricity cheaply by their own plants if the power company will not meet their terms. A similar situation prevails with respect to gas used for industrial purposes. Indeed, there are certain com-

panies, such as the Buffalo, Niagara & Eastern Power Company, for which a major part of their business is probably of this highly competitive nature.

But the fact that a large part, or even the major part, of the service of a public utility is supplied under conditions where the customer can take care of himself by the use of his bargaining power, in no way relieves the government of the necessity of protecting the small customer who lacks this bargaining power. On the contrary, it may even serve to increase the urgency of governmental price control for this latter group of consumers. For a public utility that is under pressure to make great concessions in order to get the highly competitive large-power business is under added temptation to impose upon that portion of its customers who cannot choose between paying the company's price and producing their own current. The presence of a precisely similar situation in railway history, when the railroads granted rebates to favored customers like the Standard Oil trust, was the impelling force that led to the passage of the first Interstate Commerce Act in 1887. In the public utility field, railway history is simply repeating itself. We do not mean to imply that the power companies are not justified in charging lower rates to large power users, when these rates are necessary in order to get the business, nor do we overlook the fact that companies which develop a large power business are in a position to reduce their rates even for the small consumer. What we do deny, however, is that the presense of keen competition in the service of industrial power justifies the conclusion that the remainder of this service will be supplied at reasonable rates through the "enlightened self-interest" of the companies.

But in their effort to meet the obvious criticisms of their position that have been suggested in the preceding paragraphs, supporters of the Hadley doctrine make much of the point that, even for small consumers, the most profitable price that a company can charge is a *low* price, since low rates stimulate a high demand for the service. For example, if electric current is supplied to householders at as high as 10 cents per kilowatt hour, the use of electricity is kept down to a minimum. But if the same current is offered at 5 cents or less, consumers will flood their house with light, install labor-saving devices and conveniences like vacuum cleaners, electric refrigerators, electric washing machines, and even electric cooking stoves. In this way, it is argued, the lower unit profits resulting from the low rates of charge are more than made up by the higher total profits resulting from the increased business and from the improved load factor. This being the case, the public problem of getting reasonable rates for untility service is merely the problem of enlightening the public utility managements as to how they can make the most money for their stockholders.

That low prices for electricity do indeed encourage a greatly increased demand for service has actually been the actual experience of a large number of public utility companies. That, up to

a certain point, this increased demand will more than make up for the loss of profits on any given amount of business has also been the experience of utility operators. But there is a point of maximum profits below which the increased business does not make up for the lower unit profits, and when this point is reached a company will not reduce prices further if it follows the policy of securing the largest returns for its stockholders. There is not the slightest ground in economic theory for supposing that this point of "maximum profits" is the power point at which rates should be fixed in the *public* interest. There is no reason, indeed, why rates should not be still further reduced as long as they yield earnings sufficient to meet operating expenses and to pay a return to stockholders sufficiently large to attract the needed capital for extensions and improvements. But unless company managements can be expected to take a public point of view that transcends the profit-making motive, it is idle to suppose that anything but governmental control can result in a reduction of rates below this point of maximum returns to investors.

Advocates of the Hadley doctrine ignore completely one highly significant factor when they assume that the most profitable rates are the lowest rates. The factor which they overlook is the modern device of public utility managements which has come to be known as the "promotional rate." A promotional rate is a rate, materially lower than the maximum rate, designed to create a demand for additional amounts of service that would not be taken were it not for this special inducement. It may take various forms, some of which are simple and others of which, like the "four-part" gas rate proposed by the American Gas Association, are complex.

By means of this "promotional" or "inducement" rate, a company may charge a relatively high price for the minimum quantities of service which will bear a high rate, while at the same time offering a much lower rate in order to secure that highly elusive luxury demand which will not stand the maximum rate. Used within reasonable limits, an arrangement of this kind is entirely sound on social and economic grounds; and our purpose in mentioning it in this place is not to criticize it. Here we are pointing out simply that the use of the promotional rate, which is rapidly extending in this State and elsewhere, completely upsets the theory that the pressure to expand their business will compel companies to charge no more than "reasonable rates" to everybody and for all kinds of service. For by the use of such a rate, companies are in a position to get the benefit of an expanding demand for low-priced service, while also getting the benefit of a limited demand for high-priced service. Unless the government should see fit to insist on a flat rate of charge for all service, regardless of the amount consumed, this one situation alone would prevent that correspondence between minimum rates and maximum profits which the Hadley doctrine assumes.

Section 3. Actual Cost or "Prudent Investment" as the Basis of Rate Control

The almost complete failure of the existing system of rate control, together with the well-nigh fatal objections to the alternative proposals that have just been considered, have led us to recommend a plan of regulation which accepts "actual cost" or "prudent investment" as the basis of the fair return. This plan preserves the accepted principle that rates should be fixed so as to yield a "reasonable return," but it differs fundamentally from the present system in that it bases the rate of return, not on a fluctuating and unstable measure called "present value" but rather on the capital actually contributed by the security holders.

We recommend this plan with all the more confidence because it has the support of a large number of able and impartial experts both in the legal and in the economic aspects of public utility regulation. Its most distinguished supporter has been Mr. Justice Brandeis of the United States Supreme Court, who wrote an extended defense of the principle in his opinion in the Southwestern Bell Telephone case.* It has been favored by many economists including Professor W. Z. Ripley and Dr. John Bauer; by legal authorities such as Professor Goddard and the late Gerard C. Henderson; by business executives including Owen D. Young, and by numerous members of the public service commissions throughout the country. Within the last few weeks it has received the sanction of all but one member of the Interstate Commerce Commission, which has urged the Federal Congress to amend the Railroad Valuation Act so as to apply the prudent investment principle along lines similar to those which we have incorporated in our proposed bill.

In some one of its many varied forms, the actual cost principle has already been successfully applied in the control of public utility companies both in this country and abroad. In England, where the "present value" doctrine is unknown, gas companies and other privately owned utilities for many years have been regulated on this principle. The new Electricity Supply Act, which involves a thoroughgoing reform of the electrical systems of the country, adopts actual cost as the basis on which charges are to be determined, as does the Railroad Consolidation Act of 1921, which applies to all the railway companies in Great Britain. In Canada, the plan is in widespread use, sometimes with the modification of the "sliding-scale" basis of dividends and sometimes without such modification. Even in this country, despite the impelling legal pressure to follow the "present value" standard, the principle of actual cost prevails in a considerable number of instances. For many years Massachusetts has followed it with respect to her gas and electrical corporations, and the recent attempt of financial interests connected with the Associated Gas & Electric Company to break the precedent by asserting the Federal doctrine of a "reasonable return on fair value"

* 262 U. S., 276 (1923).

aroused widespread resentment in that State and led to the appointment of a special legislative investigating committee, to consider means of safeguarding the Massachusetts policy against overthrow by the Federal courts. The two public service commissioners from Massachusetts, Chairman Attwill and Commissioner Goldberg, who accepted our invitation to testify at the hearings, have expressed their firm conviction that actual cost has been found preferable to "present value" as a rate base. Outside of Massachusetts, most of the recent "service-at-cost" franchises that have been agreed to between the street railway companies and the municipalities abandon "present value" completely and accept actual cost as the standard. Even in the electric power field, the plan has been in operation since 1917 in Dallas, Texas, under a franchise agreement between the city and the Dallas Electric Light and Power Company, a utility managed by the Electric Bond & Share Company. The supervisor of public utilities of the city of Dallas informs us that this franchise agreement has proven satisfactory from a public standpoint.

The merits of a system of rate control based on actual cost may readily be inferred from the reasons which we have given for the break-down of the "present value" standard. "Present value" is indefinite as to meaning, is costly, controversial and time-consuming as to ascertainment, and is subject to wide fluctuations resulting in great speculative gains or losses. Actual cost, if properly defined is definite in meaning, is ascertainable with relative freedom from expense, time and dispute, and does not fluctuate from year to year with changing conditions and changing attitudes of commissions and courts. Under the "present value" standard, regulation has the impossible task of attempting to prevent speculative profits while subjecting investors to great speculative risks. Under the actual cost standard, regulation can consistently and successfully reduce speculative profits because it can minimize speculative risks.

We deem it to be a cardinal principle of effective regulation that the rate of return which investors may be permitted to earn on their capital should be specified, as definitely as is feasible, prior to the time that the investment is made. This does not mean that government need *guarantee* a specified return. It does mean, however, that the whole question of the investor's rights must not be left undetermined and subject merely to the unpredictable findings of a court or commission, the arbitrary nature of which is disguised under the specious phrases "reasonable return on the fair value" of the property. The more definite and predictable are the investors' rights to a return, the lower is the yield necessary in order to attract capital. For it is a commonplace of finance that the securities that carry the minimum risks are the securities that can be sold at the lowest rates of interest or dividend.

It is doubtless true that public utility securities can be sold, as indeed they have been sold, under no more definite conditions

as to future yield than may be inferred from the vague standards of rate control which now prevail. But they can be sold under these conditions only on terms which give the investors the opportunities of fabulous profits in case their gamble as to the future rate base and the future "reasonable rate of return" turns out in their favor. So far the gamble has turned out very decidedly in their favor, as is evident from the astonishing profits made by investors in utility stocks during the last decade. But the public has paid for the winnings in the price of service which the utilities have rendered. Unfortunately, if the gamble should turn out unfavorably to the investors, as indeed it may during the next decade, the public will against lose because of the poor service that is bound to ensue from the injury to public utility credit.

Critics of the actual cost basis do not deny the fundamental truth of the contention that a definitely stated stable return would improve public utility credit and make possible the attraction of capital at minimum expense to the public. They do insist, however, that this rate base cannot in practice give any such assurances of a stable return as it assumes to do, and they also object to it on the ground that it will discourage efficiency of construction and operation. These objections deserve careful consideration, and we therefore discuss them in the following paragraphs.

Objections to the Word "Prudent" in the Phrase "Prudent Investment"

We have been informed by various persons in touch with the public utility companies that one of the most serious misgivings entertained by these companies has to do with the implications of the adjective "prudent" in the prudent investment formula. If only such capital contributions will be allowed to earn a return as have been "prudently" invested in the public service, fear is expressed that hindsight rather than mere foresight will be used by a commission, and that it will find certain expenditures to have been "imprudently" made simply because actual experience proves that they were mistakenly incurred.

If the "prudent investment" standard were indeed to result in the application of a rule of hindsight rather than of foresight, and if companies were to be penalized for construction expenditures, which however reasonable at the time, turned out to be mistaken, we should indeed be quite ready to concede the soundness of the objections just raised. No such construction of the term "prudent investment," however, is in the minds of those who support this principle. The adjective "prudent" has been used simply in order to indicate that the rate base must not include fraudulent, extravagant and unreasonable outlays. Even these terms, to be sure, are not in themselves definite and might occasionally lead to a controversy, but, in such an event, the public utility companies have the clear right of appeal to the courts which have had a long tradition and experience in interpretation of phrases of this nature in ordinary cases of business contracts

and in the law of principal and agency. Even without a statutory safeguard, therefore, we believe that the fears of the public utility companies are groundless in this respect.

In order to add a double safeguard, however, and in order also to protect the public against the necessity of paying a return on expenditures of highly doubtful wisdom, we have inserted into the proposed bill a clause providing that all major capital outlays must be approved in advance by the public service commission. Such approval, in the absence of fraud, would clearly give to the public utility companies the right to insist that the capital expenditures in question should be included in the rate base.

Objection That the Principle of Reasonable Return on Actual Cost Will Fail to Secure Capital Because It Fixes a Maximum Rate of Return Without Guaranteeing That This Rate Will Be Earned

We refer here to the objection made by President Hadley against the "prudent investment" principle, an objection which seemed to him so critical that he predicted the complete failure of the plan. His point is that any system of rate making which sets a definite limit on the earnings to which security holders are entitled, will fail to attract capital unless it also guarantees security holders against the risks of securing less than the stipulated rate of return. For example, if public utility rates are to be reduced whenever the company is earning more than seven per cent on its investment, the mere legal right of the company to insist that rates be raised when the return is less than seven per cent, will not constitute any assurance that this standard earning power can be maintained. The experience of the street railways companies is striking proof that, no matter what rates of charge a commission might be willing to approve, commercial conditions often prevent a company from raising its charges to the point where they yield an adequate return. This being the case, the only way in which capital can be attracted into the industry is through the adoption of a policy which concedes very high returns to those companies which are fortunate, as an offset to the very low returns with which the less fortunate company must be content. Unless, therefore, the State is willing to guarantee a minimum return to these unlucky companies, and to pay the deficits out of tax receipts, it cannot deprive lucky companies of their right to speculative profits.

Although the position thus taken by President Hadley has often been advanced by public utility representatives, we believe that it rests in part on an economic fallacy, and in part on a failure to understand the specific provisions of the type of rate control which has come to be known as the "prudent investment" plan. The economic fallacy to which we refer lies in the unwarranted assumption that a maximum rate of return deprives investors of any compensation for the risk that this maximum may not actually be attained. If the rate of return were to be fixed at a mere savings bank rate of interest, say four per cent, then it would, indeed be true that capital could not be attracted unless the

as to future yield than may be inferred from the vague standards of rate control which now prevail. But they can be sold under these conditions only on terms which give the investors the opportunities of fabulous profits in case their gamble as to the future rate base and the future "reasonable rate of return" turns out in their favor. So far the gamble has turned out very decidedly in their favor, as is evident from the astonishing profits made by investors in utility stocks during the last decade. But the public has paid for the winnings in the price of service which the utilities have rendered. Unfortunately, if the gamble should turn out unfavorably to the investors, as indeed it may during the next decade, the public will against lose because of the poor service that is bound to ensue from the injury to public utility credit.

Critics of the actual cost basis do not deny the fundamental truth of the contention that a definitely stated stable return would improve public utility credit and make possible the attraction of capital at minimum expense to the public. They do insist, however, that this rate base cannot in practice give any such assurances of a stable return as it assumes to do, and they also object to it on the ground that it will discourage efficiency of construction and operation. These objections deserve careful consideration, and we therefore discuss them in the following paragraphs.

Objections to the Word "Prudent" in the Phrase "Prudent Investment"

We have been informed by various persons in touch with the public utility companies that one of the most serious misgivings entertained by these companies has to do with the implications of the adjective "prudent" in the prudent investment formula. If only such capital contributions will be allowed to earn a return as have been "prudently" invested in the public service, fear is expressed that hindsight rather than mere foresight will be used by a commission, and that it will find certain expenditures to have been "imprudently" made simply because actual experience proves that they were mistakenly incurred.

If the "prudent investment" standard were indeed to result in the application of a rule of hindsight rather than of foresight, and if companies were to be penalized for construction expenditures, which however reasonable at the time, turned out to be mistaken, we should indeed be quite ready to concede the soundness of the objections just raised. No such construction of the term "prudent investment," however, is in the minds of those who support this principle. The adjective "prudent" has been used simply in order to indicate that the rate base must not include fraudulent, extravagant and unreasonable outlays. Even these terms, to be sure, are not in themselves definite and might occasionally lead to a controversy, but, in such an event, the public utility companies have the clear right of appeal to the courts which have had a long tradition and experience in interpretation of phrases of this nature in ordinary cases of business contracts

and in the law of principal and agency. Even without a statutory safeguard, therefore, we believe that the fears of the public utility companies are groundless in this respect.

In order to add a double safeguard, however, and in order also to protect the public against the necessity of paying a return on expenditures of highly doubtful wisdom, we have inserted into the proposed bill a clause providing that all major capital outlays must be approved in advance by the public service commission. Such approval, in the absence of fraud, would clearly give to the public utility companies the right to insist that the capital expenditures in question should be included in the rate base.

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investors could be definitely assured that this minimum interest would be earned under all conditions. If, however, the rate of return is fixed at a higher amount, say seven per cent, then the yield is in itself made sufficient to cover the risks that necessarily attach to an investment in a public service enterprise. The precise point at which the rate of return must be fixed depends on the degree of risk involved and must, therefore, be set at such a point as suffices in actual experience to bring forth the necessary capital investment. Even the existing system of regulation, as it has been developed under the ruling of the courts, rests on the soundness of the doctrine of a limited return. The fact, however, that the present system bases this return on a highly indefinite and fluctuating standard called "fair value," has made the application of limited return extremely difficult because it has introduced a factitious element of speculation, instead of reducing the speculative character of public utility investments to a minimum.

In one further important respect, President Hadley clearly misconceives the type of "prudent investment rate base" which we propose. He objects to the plan on the ground that it requires the Public Service Commission to fix charges which will yield precisely the stipulated rate of return—a task which he thinks quite impossible. We are fully aware that no commission, however intelligent, can predict accurately what earnings will result from a new schedule of rates. We have, therefore, taken into account this uncertainty by proposing that a rate equalization reserve be set up, and that any deficits below a fair return, which a company may incur during a given year, shall be charged to this equalization reserve, and shall, therefore, not constitute a permanent loss to investors.

In order to give increased security in this respect, we have incorporated in the proposed bill a still further protection which may be invoked even by a company that has not as yet succeeded in building up a rate equalization reserve. According to this provision, all deficits below a fair return may be accrued by a company for a period of three years, with the result that a company which fails to secure a reasonable return during any given year will be given the opportunity of making good the loss out of any excess earnings which it may be able to make during the subsequent three years.

Even these safeguards, to be sure, liberal as they are to the companies, do not constitute a guarantee of earnings, and we have no doubt that there will be cases where investors will sustain a permanent loss on their security holdings. As compared, however, with the system which now prevails, the security of public utility investments should be very greatly enhanced, and this improvement in security should redound to the benefit of consumers through the lower fixed charges which will have to be provided for out of earnings.

Objection That the Adoption of the Actual Cost Basis of Rate Control Will Curb Initiative of Management

In our opinion, all the objections thus far mentioned against actual cost as the rate base are so obviously out weighted by countervailing considerations as to leave little ground for argument on the subject. One further criticism, however, must be given special attention, as it constitutes, in our judgment, the only truly serious economic objection to the actual cost rate base. This is the objection that public utility companies, if limited to a definite rate of return on a definite rate base, will be under no incentive to strike for maximum efficiency, since all the benefits of any increased efficiency will go to the consumers in lower rates, instead of being shared between the stockholders and the consumers. A dead-level of mediocrity may ensue, such as is popularly supposed, at least, to characterize governmentally owned enterprises. This objection is a forcible one, and it should be faced frankly by those who feel, as we feel, that the actual cost basis offers the only feasible solution of the problem of regulation.

We would call attention, first to the fact that this same criticism applies in theory to all types of regulation which make use of a rate base, regardless of whether that rate base be "present value," or reproduction cost, or actual cost. For in all of these cases, the reasonableness of the rate of charge is made dependent on the ability of the company to earn a certain, standard return, and the presence of any excess over this return shows that a reduction in rates is called for.

But critics of the prudent investment standard, like President Hadley, point out that, while in theory, the "present value" rate base will limit earning power no less than the "actual cost" rate base, in actual practice it has not done so because of the very fact that its indefiniteness, cumbersomeness, and its extreme liberality (under present economic conditions and under recent Court rulings) has prevented its becoming operative in all but extreme cases. To put the matter bluntly, yet truthfully, the real charm of existing regulation is that it has not really regulated. Its very ineffectiveness constitutes its one real virtue as well as its vice. Precisely here lies the real danger of the actual cost basis. Its objectiveness and feasibility of administration gives ground for the belief that, in the hands of a capable and vigilant commission, it will actually be put into operation, with the result that public utilities companies will in very fact be limited to a "fair return" on the investment. From the public point of view, this may not be an unmixed blessing, unless some means are found by which efficiency is encouraged and inefficiency is discouraged.

We do not believe, however, that even the existing system, if it were allowed to remain, can be looked upon with complacency as an effective solution of the problem of encouraging efficiency. Within recent years, to be sure, it has left the electrical utilities fairly free to arrogate to themselves any increased earning power because of the fact that the high level of construction costs has caused the

"present value" of property to soar to heights which make possible the justification in court of almost any income that the utility companies have been able to earn. This situation, however, cannot be expected to continue indefinitely. If the price level remains stable, the time will soon arrive when reproduction costs are not materially higher than actual costs; and if the price level should fall materially, the former may be very much lower than the latter. In that case, the repressive effects of strict regulation may make themselves felt with quite as much force under the "present value" doctrine as under the actual cost doctrine. It is true that, even under these circumstances, the long delays that take place under the cumbersome machinery required by a physical valuation of property may continue to cause lags in the regulating process, so that a company may be able to enjoy excessive earnings during that uncertain period that may elapse before a commission can enforce a rate reduction. But this dependence on the very vices of the existing methods of rate control is obviously a poor makeshift as a device for encouraging efficiency.

If it is true, as we believe, that even the existing system of regulation is far from satisfactory from the point of view of encouragement to efficiency, it is also true that the actual cost basis of control, even in the absence of special provisions to encourage efficiency, is by no means as deficient in this respect as has often been supposed. Even a company that finds it possible under the actual cost basis to earn the full rate of return to which it is entitled, will still be under an inducement to improve its service and to reduce its operating expenses in order to improve the credit rating of its securities. The value of public utility bonds and stocks depends not alone on the rate of return which they are now earning, but on the assurance that this rate can be maintained in the future even during periods of adverse business conditions. It goes without saying that the securities of a company which is managed with skill and economy, and which succeeds in cultivating the good will of its patrons, will have a much greater value than will the securities of a company which is inefficiently managed, which is obliged to charge high rates for its service, and which is, therefore, subjected to public attack and to dangers of municipal competition.

Under the actual cost basis of control, there remains the further incentive that a well managed company will be able to reduce its rates to the minimum and will thereby be able to create a demand for rapid extensions of its plant and facilities. Such a demand will make it possible for the company to sell large amounts of new securities, and to secure the return to which it is entitled on the additional capital investment. Where the new securities take the form of new common stock, the right to subscribe to this stock may be offered to existing shareholders, who will benefit by the difference between the price at which the stock is offered to them and the market value of the stock after it is issued.

But we do not believe that the profit incentive is the only one or even the primary one which must be relied upon to secure able,

efficient and progressive management. We are convinced that among the very ablest of the public utility executives and managers there exists even today a pride of workmanship and a feeling of public spirit which will show itself with increasing force as the public utilities of the country come to be more and more looked upon in the place of public agents, rather than of devices to fatten the pockets of speculative investors. Public utility managers are paid for their services by means of salaries, and the stock which they hold in their companies constitutes the merest fraction of the total outstanding stock. It seems a doubtful expedient to reward or penalize hundreds of thousands of investors, who have nothing whatever to do with the management of the property, and most of whom are deprived even of a nominal voting power by the use of the non-voting stock, simply as a device for encouraging efficiency on the part of the active management.

In one respect at least we believe that the adoption of the plan of regulation which we hereby propose will improve the operating efficiency of public utility companies rather than the reverse. It is a well-known fact that public utility companies today are under great inducement to retain in service plant and equipment which has become obsolescent and inadequate. This is true because, under the "present value" standard, property which is retired from service cannot be included in the rate base. As long as such property remains in service, however, it may be included in this base, and while, under the *theory* of the "present value" doctrine, it should be subject to a very drastic write-off in value because of its obsolescence, actually Courts and Commissions tend to make no such thoroughgoing deductions for obsolescent conditions as the logic of their theory would require. So well recognized is this fact, that electrical companies and other utilities frequently retain old equipment in nominal service simply in order to keep the equipment in the class "of property used and useful in the public service." The consequence of this situation is that public utility companies are far less progressive in the extent to which they scrap their old plant and equipment than are the more forward looking unregulated industries. Such progress as does take place,—and it is very considerable in the electrical and the telephone industries—generally awaits either the time when additional plant and equipment must be added, or else the time when the old equipment becomes so completely worn out or so ridiculously obsolete that it cannot longer be retained in service. The bold policy of scrapping equipment which is still doing effective service, just because new equipment would be sufficiently economical to justify the change, seldom takes place.

This pressure upon companies to retain in service old plant and equipment in order to keep it in the rate base as long as possible, constitutes in our opinion a serious defect in the existing system of control. We have endeavored to find a remedy in the plan which we propose for regulation on the principle of actual cost. This is

done by the provision that companies shall set up large and adequate depreciation reserves and that all retirements of plant and equipment shall be charged against these reserves. Since the property represented by these depreciation reserves will not be entitled to earn a return, but will only be used as a security for the maintenance of stable earnings on the contributions of investors, a company will not incur a loss when it retires an obsolescent asset and when it charges the book value of this asset to the depreciation reserve. No loss is incurred because the rate base remains undiminished by the withdrawal of the property so long as the credit to depreciation reserve is sufficient to absorb the charge against it which the retirement imposes.

While, for reasons which have just been stated, we believe that the proposed actual cost basis of rate control is not likely to discourage managerial efficiency more seriously than does the present system, we are not satisfied to rest without suggesting that a determined effort be made to improve the plan still further by adding to it special features designed to encourage good management and to discourage bad management. The possibility suggests itself of applying a flexible rate of return to certain classes of public utility securities, perhaps to all common stock which enjoys a voting right, or perhaps to a special class of managerial stock which might be issued in the future. This differential return might be made to depend on a grading of the different plants by reference to their relative performances as to economy of operation and efficiency of service.

The question arises whether objective tests can be devised as a basis for this "merit rating" system. Certainly no tests of this kind have as yet been developed, but at the hearings of the committee, Mr. Robert L. Livingston, consulting engineer of the Long Island Lighting Company, expressed the opinion that they could be developed in the future.* We believe that the suggestions which he made might well become the basis of an extended study by the Public Service Commission.

In the time at our disposal, it has been quite impossible for us to come to any definite conclusions as to whether a differentiated rate of return, designed to encourage efficiency, ought to be allowed, and as to how this rate should be measured, even assuming that it is desirable as a matter of principle. We have, therefore, included in the proposed bill, a provision authorizing the Public Service Commission to investigate the problem of a differential return, and to report its findings and recommendations to the Legislature.

The Problem of Encouraging Consolidations

On every important aspect of the problem of efficiency is that of consolidations. Public utility operators and engineers have been almost unanimous that the recent consolidations of different operating properties into united systems, physically interconnected and under common management, has been of great service in reducing

* Hearings, pages 1956, et seq

operating expenses and capital costs. The increased efficiency is the result of several different factors. First, there is a saving in the amount of emergency or stand-by equipment that is necessary, since the pooling of the power makes it possible to reduce the relative amount of reserve facilities; second, there is an improvement in the load factor resulting from the averaging of diverse loads of different commodities; third, there is a saving resulting from common management of a large system, especially where that system grows to the point where executives and engineering advisors of the highest talents can be secured.

Within recent years consolidations of hitherto independent properties have been taking place at an extremely rapid pace in New York State, as well as throughout the entire nation. The recent purchase of control of the Broooklyn Edison Company by the Consolidated Gas Company, the development of the Niagara Hudson Company tying up many properties through western, central and northern New York, and the amazingly rapid growth of the Associated Gas system, which now covers more than one-third of the total area of New York State are important instances in point. These combinations have taken place by an exchange of securities, as a result of which one company becomes a great holding company to control the operating subsidiaries.

The particular incentive that has led stockholders to consent to the exchange of stock necessary for these consolidations has been the hope that the securities of the combined system would yield more than the securities of the separate properties have yielded. This hope is based on the expectation that the savings anticipated from the consolidation would go, in part at least, to the stockholders in the form of higher dividends. The question may be raised, however, whether the adoption of a definite rate base which limits the rate of return on investment to a certain specified amount, may not hold up combinations in the future, because of the fact that the expected operating economies, if realized, would redound *entirely* to the benefit of the public instead of being shared partly with stockholders through the enhancement of the dividends.

We believe that this possible danger resulting from the adoption of the actual cost basis of rate control should be faced frankly, and that the most effective way of meeting the difficulty should be considered. One possibility suggests itself in the enactment of a provision giving to the Public Service Commission the power to permit consolidations under an agreement whereby a certain percentage of any gains in operating economy realized during a certain stipulated period of years should go to the consolidated company for distribution or for reinvestment in the property.

The whole problem, however, of a proper public policy with respect to consolidations is so large and complex, that we have not been able to devote to it the time necessary to reach any definite conclusions on the matter. We, therefore, suggest that legislation on the subject be deferred until the more insistent problems of introducing a new type of rate control have been disposed of. A

postponement of this problem is all the more in order because of the fact that it is so closely tied up with the St. Lawrence River water power program. The development of the St. Lawrence power has not been considered by our committee, as this subject has been left for study by a special commission. Yet the problem of consolidations throughout the State and the problem of water power development are so obviously interrelated that the two matters must necessarily be considered together. Assuming that the Commission to study the St. Lawrence project should deem it inexpedient to cover the more extended problem of consolidation of the entire generating, transmission and distributing systems throughout the State, then we think that this problem should be studied either by a new special commission to be appointed by the legislature, or else by the Public Service Commission, acting under specific instructions from the Legislature. The proposed bill which we submit calls for a special study and report by the Public Service Commission.

Financial Soundness of the Actual Cost Doctrine Conceded by Company Representatives

The inherent soundness of the actual cost basis of rate control from the point of view of financial policy has been repeatedly attested to by various representatives of the companies themselves. We have already noted that this basis of regulation has been approved by Mr. Owen D. Young, Chairman of the Board of Directors of the General Electric Company. At the recent hearings before the Interstate Commerce Committee of the United States Senate, at which the proposed merger of interstate communication systems was under discussion, Mr. Young is reported to have testified as follows on the proper basis of rate regulations:

> I think, Senator, there are two ways of dealing with rate basis: One is, to take the actual investment that went in and give that a fair return. That is one way to do it. The other is, to take reproductive cost of property, which during the last few years because of the diminishing purchasing power of the dollar has been going up and therefore has been rather unfair. Over an average number of years, it is very likely to go down again, but I do not know. So far as I am personally concerned, I prefer very much to see a rate base fixed on the actual investment and not on reproductive value.

Even some of the very company executives who have insisted, at the hearings of our committee, on the *constitutional right* of a company to earn a return based on the "present value" of the property, have by implication conceded the economic soundness of the actual cost standard; for they have indicated that their own *voluntary* policy of rate-making is to fix rates so as to yield reasonable, stable dividends. It is hardly necessary to point out that stability and regularity of dividends is quite impossible on any basis of rate control which causes the earnings to fluctuate

with the ups and downs of periodic reappraisals. The testimony of Mr. Charles T. Russell, vice-president and general counsel of the New York Telephone Company, is highly significant on this point.* Mr. Russell was asked to comment on the so-called "Gifford Policy," enunciated by Mr. Gifford in his report to the stockholders for the year 1927 as president of the American Telephone & Telegraph Company, the parent company of the New York Telephone Company. The following is a partial quotation of Mr. Gifford's remarks:

> "The American Telephone & Telegraph Company accepts its responsibilty for a nationwide telephone service as a public trust. Its duty is to provide the American public with adequate, dependable and satisfactory telephone service at a reasonable cost. To attain this end, it is the policy of the company to pay only reasonable regular dividends, and for part of the new capital needed, to offer from time to time new stock to its stockholders on favorable terms, for it believes this method of financing will provide the money needed for the business cheaply and with more certainty in good times and bad than any other.
>
> "The safety of principle and regular dividends have been the compelling motives that have led to the widespread ownership of the stock of the Company. * * * Extra or special dividends are entirely inconsistent with this aim and would be unsound. Earnings must, of course, be sufficient to permit the best possible telephone service at all times and to provide a reasonable payment to stockholders with an adequate margin to insure financial safety. Earnings in excess of these requirements will either be spent for the enlargement and the improvement of the service furnished, or the rates charged for the service reduced. This is fundamental in the policy of the management."*

Referring to this expression of policy, counsel for our Commission asked Mr. Russell how it could be reconciled with the recent action of the New York Telephone Company in demanding before the Statutory Federal court the right to earn a return of 8 per cent on what is alleged to be the "present value" of its property, a value far in excess of the funds contributed by security holders. In reply, Mr. Russell did not deny the discrepancy between the doctrine of "reasonable return on fair value" and the doctrine of "reasonable, stable dividends." He defended the recent action of the company, however, solely on the ground that it had *voluntarily* proposed to accept a more rational solution of the problem of rate control than would be required under the "present value" doctrine, but that this proposal had met with rebuff from the New York Public Service Commission. No alternative, he said, remained but to go to the courts and to insist on

* Hearings, pages 5732, et seq.
* Hearings, pages 5732-5.

the company's traditional constitutional rights. We quote a part of his own statement on this matter:

> "Granting that in some circumstances rates less than sufficient to enable the company to earn a fair return on the fair value of its property (the constitutional minimum) might nevertheless be sufficient to meet the requirements of these policies, it does not follow that at the end of a decade of enforced inadequate rates far below those necessary to meet reasonable revenue requirements on any basis the company is expected to continue to give up voluntarily a part of the earnings which the Constitution protects its right to earn, if it can. Is it not fair to say that the policy should be regarded as an offer which the Public Service Commission of New York refused to accept, leaving to the company as the only alternative, its resort to the courts for the protection of its legal rights?*

It is quite unnecessary for us to express any opinion, in this place, as to whether or not Mr. Russell was justified in his contention that, in fact, much less than fair return on actual investment had been earned during the previous ten years of the company's history. For present purposes, indeed, we are quite ready to assume that his contentions were correct. The point to be stressed is that a responsible executive officer of the New York Telephone Company not only concedes the inconsistency between the Gifford policy of reasonable dividends and the judicial doctrine of "reasonable return on fair value," but is obliged to defend the company's resort to its constitutional rights under the latter doctrine on the *express ground* that its own voluntary offer to abide by a sounder basis of rate control was declined by the Public Service Commission. We submit that this statement constitutes an admission out of the mouths of the company representatives themselves that something is wrong with the "present value" doctrine.

But the American Telephone & Telegraph Company is not alone in admitting that its own financial policy proceeds on the doctrine of a reasonable rate of dividends rather than on the doctrine of a return fluctuating with the "fair value" of the property. To the same effect is the testimony of Mr. M. S. Sloan, president of the New York Edison Company, who referred as follows to his policy while he was president of the Brooklyn Edison Company:

> "In practically every rate reduction that I made in the Brooklyn Edison Company, *I gave no consideration to the question of the value of the property.* It was simply whether we were earning and paying the eight per cent. return on the outstanding stock of the company. And by making those reductions the Brooklyn Edison Company has grown and prospered so that over a period of time from 1919, when I went there, up to 1929, the property has grown to the extent that today we are earning something like a gross revenue of about $42,000,000 as compared to $8,000,000 in 1919."†

* Hearings, page 5751.
† Hearings, page 3609. Our italics.

The policy that Mr. Sloan states that he adhered to as a voluntary matter, the policy of charging sufficient prices for service to "earn and pay the eight per cent. return on the outstanding stock of the company," is precisely the policy that is inherent in the actual cost basis of rate control but that is contrary to the "present value" basis. Especially in view of Mr. Sloan's high standing as one of the ablest and most progressive public utility executives in the country, we regard this testimony as a significant tribute to the financial soundness of the plan of rate control which we proposed. Indeed, Mr. Sloan himself did not suggest any criticisms of the fairness or the economic soundness of this plan, and his only objection to it was based on the contention of counsel for his company that the scheme is unconstitutional.

The inherent soundness and fairness of the "actual cost" principle, and the unsoundness and unfairness of the "present value" principle is constantly admitted, implicitly though not explicitly, by those public utility representatives who defend the present system of regulated private ownership against the supporters of governmental ownership. These defenders of the existing regime almost invariably find it necessary to fall in to the language of the "actual cost" basis of regulation in order to convince the public that the earnings of public utility companies are subject to strict limitation. In reading these appeals for support, one almost never sees any references to the right of utility companies to earn a return on unearned increments like "water right values," franchise and easement values, land values, going values, and all the other array of property rights which the utility companies parade before a court or a commission in an actual rate case. The complete silence of the utility spokesmen on these matters is offset by the assertion that utility companies are limited to a "non-speculative return," to "reasonable dividends," and to a reasonable yield on their *investment*. It is hardly necessary to point out that, under the present law of public service regulation, the utility companies are not controlled on any such principles as those which have just been mentioned. Only under some form of the actual cost standard would regulation do in fact what the utility representatives desire the public to believe is now being done by governmental regulation.

A concrete instance of this effort of utility representatives to convey the popular impression that actual cost is the accepted standard of rate-making, may be found in the recent remarks reported to have been made by Mr. Floyd L. Carlisle, chairman of the board of directors of the Niagara Hudson Company, at a public meeting in Albany on the subject of the proposed St. Lawrence river power development. At this meeting Mr. Carlisle repeated a statement which he previously made before our committe, to the effect that his own company fully realizes its obligation to serve the public at rates which yield only a reasonable, limited profit and *that even now his company is giving its service at cost*. We do not believe that a reading of Mr. Carlisle's testimony at our hearings will bear out this contention that the com-

pany has in the past given its service "at cost," or that it has any intention of so doing in the future. Indeed, Mr. Carlisle stated expressly that his company would insist on its rights to have rates based, not on cost but on "value." But if one takes his assertion as to the principle of "service at cost" as the correct one, then one cannot escape the conclusion that a complete change in the system of regulation, a change which adopts the actual cost basis of rate control, is called for.

Section 4. The Specific Provisions of the Proposed Bill to Establish a Rate Base

Up to the present time we have referred simply to the general merits of some form of rate control based on the actual cost of the property rather than on its so-called value. The effectiveness of the new basis of control, however, must depend largely on the precise provisions of the plan, since any serious flaws in these provisions might doom the entire scheme from the outset. We therefore submit a proposed bill to be incorporated as an amendment of the Public Service Commission Law, which embodies those principles of control which we have defended in the preceding sections.

We do not undertake here to discuss in detail every clause in the accompanying draft of the bill. If these detailed provisions are not sufficiently clear in themselves without accompanying explanations, that fact alone shows flaws in the draftsmanship, which should be corrected before the bill is passed. It is only fair to say that while we have given careful attention to the general principles embodied in the act, and while we believe that the evidence adduced at its open hearings amply justifies a thorough revision of the present basis of regulation which the bill incorporates, we also recognize that the limitations of time have prevented a detailed discussion before our committee of the specific provisions which appear in the present draft of the bill. Our efforts to secure the critical comments of public utility representatives on the precise features of the plan has been defeated moreover by the persistent refusal on the part of the companies to take seriously any program of rate control that does not conform to what they are pleased to consider their constitutional right to earn a return based on a periodic reappraisal of their properties. We assume, therefore, if the bill is to receive favorable attention from your honorable body, that adequate opportunity will be given to all interested parties to raise objections to any particular features of the bill as now drafted.

In a general way the present draft accepts a policy of regulation set forth and defended at length by Dr. John Bauer in his book entitled "Effective Regulation of Public Utilities".* Dr. Bauer, however, has presented a material revision of his plan at the Hearings of our committee, designed to meet the more serious criticisms that had been made against his original proposals. While we have

* New York, Macmillan, 1925.

followed in a general way this revised plan submitted by Dr. Bauer, we have made still further amendments of a material nature, which in our opinion will greatly strengthen the measure.

We turn now to the more important provisions of the bill.

I. Types of Utility Properties Subject to the New Rate Base (Sec. 150)

Instead of including under the provisions of the bill all public utility properties, we propose that at the present time the plan be made applicable only to those gas, electric, water supply and telephone properties which are owned by companies subject to the jurisdiction of the commission. Steam railroad properties are omitted because of the fact that they are so largely under the control of the Interstate Commerce Commission. Street railroad properties are also omitted because the unfortunate commercial difficulties under which most of these properties are operated makes the question of rate control by reference to any specific rate base almost academic. At all events, the problem of street railway regulation is so unique under present conditions that we think it should be made the subject of special study at a later time. We have also decided to omit motor transportation from the provisions of the bill because we believe that this new type of utility enterprise operates under economic conditions which may require an entirely different scheme of regulation. We have been unable in the limited time at our disposal to give sufficient attention to the problem of control over motor carriers, and we have, therefore, not reached any definite conclusions as to whether the plan of rate control which we now propose should ultimately be applied to this type of enterprise.

II. The Rate Base (Secs. 151, 152)

The first object of the proposed bill is to set up a definite, objective and stable rate basis, which will not vary with changing price levels, and which will be increased or decreasd only to the extent that new capital contributions are made to the property or that old property is withdrawn from service. With this object, the bill first provides that the Public Service Commission shall establish an initial valuation for all property used and useful in the public service as of the date of the passage of the act. In arriving at this rate base, the Commission is directed to take into account all elements of value sanctioned under the law of the land as interpreted by the Courts. In conformity with these instructions, the Commission must give due consideration both to original costs and to estimated reproduction costs, with whatever additions for intangible values may be required and with full deductions for depreciation of all kinds both physical and functional. In order to enable the Commission to determine these initial rate bases, the bill provides for a special Bureau of Valuation to be created as a department of the Public Service Commission, and to be under the direction of that body. It shall be the function of this Bureau to

secure the necessary data as to original costs, reproduction costs and other relevent facts, and it shall also be its function to aid the Commission in arriving at a fair rate base. After the data and the advisory reports of the Bureau have been submitted to the Commission, ample opportunity is to be given to all interested parties. including representatives of the public no less than representatives of the utilities, to submit evidence in support of or in rebuttal of the reports of the Bureau, and to cross-examine the Bureau's witnesses.

In many ways the proposal just set forth follows the precedent of the Valuation Act which has been applied by the United States Congress to the interstate railroads. We believe, however, that much time has been lost and much unnecessary expense involved in the valuation of the railroads because of the extreme detail with which that valuation has been made. In our opinion the use of short-cut methods should be very largly resorted to, since a valuation at best is necessarily subject to a large margin of error and of discretion. We deem it absurd, for example, to spend many millions of dollars in order to avoid a 5 per cent degree of error in the unit costs of reproduction, when the question of the weight which must be given to these reproduction costs as compared with original costs is left by the Courts so largely to administrative and judicial discretion. Indeed, where property has been recently constructed, it is not at all unlikely that the book values of these properties, when adequately checked and verified, may properly be used to the exclusion of physical appraisal. This time-saving device has frequently been resorted to by Commissions and Courts, often with the acquiescence of the utility companies themselves.

Assuming that the task of establishing initial valuations is undertaken with due dispatch, and with an adequate staff of engineers and accountants, we believe that it can be accomplished in a period of three years, or slightly more. The cost of the proceedings cannot be estimated with any precision, but we think that a budget of ten million dollars will be sufficient with the reasonable use of short-cut methods. This cost, in our opinion, should be assessed against the utility companies instead of being paid for through ordinary forms of state taxation. We have, therefore, provided that the expenditures of the Bureaus of Valuation shall be assessed upon the various utility companies in proportion to their operating revenues as determined for each year preceding the year in which the expenditures have been incurred. The utility companies, however, are to be permitted to include the assessments in their operating expenses, since the costs involved would be a proper charge upon the rate paying public.

The objection may be raised that in providing for this initial valuation, we are acquiescing in the very type of rate base which it has criticised. Our answer to this objection, however, is that the rate base which we propose is a necessary concession to the existing vested interests of public utility security holders who have invested their funds without any definite arrangements as

to the return to which they are entitled. When the proposed initial valuation is once made, however, it is to remain fixed and will not be subject to that necessity of a constant reappraisal which has gone far toward defeating the entire object of regulation.

Section 132 of the proposed bill provides that after the inital rate base has been determined, it is to be changed only by the deduction of the book values of property withdrawn from service, and by the addition of new property at its actual legitimate cost. In this way, the rate base will be kept up to date by a system of accounting control, and will not be subject to engineering reappraisals or to changes of the price level. In order to safeguard both the rate paying public and the private investors, a provision is further made that major capital additions are subject to the approval of the Public Service Commission before they may be included in the rate base. Discretion is left with the Commission to set up regulations distinguishing between major capital additions which are subject to specific Commission approval, and minor additions which can be made without the necessity of specific authorization by the Commission.

A very important provision in the bill concerns the treatment of depreciation as an element in the rate base (Sec. 152 [4], [5]). As we have pointed out in an earlier section, one of the outstanding defects of the present system of regulation is the lack of correspondence between the amount which a public utility company is permitted to charge to operating expenses in order to provide for depreciation of its properties and the amount of depreciation which Court or Commission will deduct in determining the rate base. The proposed bill is designed to correct this difficulty by providing that a public utility shall make adequate annual charges to its operating expenses in order to set up a reserve for accrued depreciation, and that the amount of this reserve shall be deducted from the book values of the corporate assets in the determination of the rate base. As a result of this provision, public utilities will be permitted to establish an ample reserve for depreciation without, however, being permitted to include the assets purchased through this reserve as an increment to the property on which they are entitled to earn a return. The grossly unfair situation which has arisen particularly in the control of telephone rates will be avoided at the same time that public utility investors will be amply protected in their right to charge the public for the full cost of maintaining their property against all types of depreciation.

III. *Rate of Return* (Sec. 153)

Although the revision of the rate base as outlined in the preceding paragraphs has received most attention in the discussion of an improved system of rate control, we deem the revision of the methods of determining the reasonable rate of return as of almost equal importance. Under the hitherto prevailing system of regula-

tion, the rate of return to which utility companies have been entitled has been fixed at a single rate applicable to the entire property. In theory at least, this rate is supposed to be increased or decreased with changing conditions of the money market in general, and of the credit of the utility companies in particular. In our opinion, this is an unsound financial policy, since it is subject to the fatal objection of applying to the entire investments in public utilities such rates of return as are deemed necessary to attract needed capital during the period when the rates of charge are being determined. The fiscal unsoundness of this procedure will be apparent if we take the analogy of a government which has to raise funds by repeated issues of bonds at varying rates of interest. Suppose that the government were obliged, whenever it made a new bond issue, to revise the interest payable on all its outstanding bonds so as to make the old issues bear the same rate of interest as must now be paid on the new issue. It does not take a financial wizard to see that such a procedure would threaten the entire fiscal machinery of finance, for it would make all outstanding bonds speculative by subjecting them to the changes in interest rates that are constantly taking place in the money market. Yet a procedure of this sort would be no less absurd than is the procedure of basing the rate of return to which all public utility investments are entitled on the fluctuating rate that happens to become necessary in order to attract new capital from time to time.

If a rate of return which fluctuates with the shifting rates of interest were, indeed, desirable for public utilities, a thoroughgoing change in the present financial structure of public utility companies would be called for. At the present time, capital for public service enterprises is raised largely by the issuance of bonds and preferred stocks, bearing fixed rates of interest and dividend. A fluctuating rate of return on the *entire* property must therefore subject the common stock to distortionate changes in earning power, while leaving unchanged the rates of income to which the senior security holders are entitled. We think it obvious that such a situation must prevent the stability of income which is essential to any plan of regulation designed to reduce the speculative features of the utility investments to the minimum.

In order to meet the objections that have just been made to the use of an "overall" rate of return, it is provided that the utility company may earn whatever sums are necessary in order to yield the interest charges which are actually required on any new issues of bonds, or on any other debt incurred for the purpose of serving the public. Similar provision is made as to the regular dividends due on new issues of preferred stock. A more difficult problem presents itself with respect to common stock, the dividend rate of which is not fixed by contract agreement between the company and the investor. For funds secured by common stock issues, therefore, the bill provides that the public Service Commission shall determine a reasonable rate of return to be allowed on the funds that

will be secured by the proposed stock issue. This determination shall be made prior to the issuance of the stock, so that the company as well as prospective new investors may know in advance just what rate of return the new capital will be entitled to earn. The Commission is directed to fix the rate at an amount reasonably necessary to attract the new capital. As an administrative policy, we think that this rate should be fixed liberally to the company, so as to encourage the use of common stock as a means of financing the additional capital requirements. Ordinarily, we should expect that the Commission would approve the issuance of new stock at par, or, in the case of non-par stock, at such prices as are fixed by the board of directors of the company. The rate of return, however, is to be fixed, not on the par or stated value of the new shares, but rather on the amount of money to be raised by the issuance of the new stock. Any difference between the rate of return as fixed by the Commission and the rate of yield at which the new stock can be sold in the open market will redound to the benefit of the old shareholders through the exercise of their subscription privileges.

***Stabilization of Rate of Return Through Rate Equalization Reserve, and Through Provisions for a Limited Accumulation of Past Deficits* (Sec. 153 [4]; Sec. 154 [1])**

It has often been said, and rightly said, that a Commission cannot establish rates of charge which are just sufficient to yield the desired rate of return on the company's investment,—no more and no less. Under the existing system of rate control, that fact creates a serious obstacle to effective rate control. For, if a Commission fixes rates of charge which turn out to yield excessive profits, the company gets the benefit of the excess, whereas if the Commission fixes rates of charge that turn out to be inadequate, the company has no *legal* right, at least, to make good this deficit in the future. This situation is unfortunate, first because of its tendency to make public utility earnings unstable, and second because of its tendency to make companies and commissioners alike reluctant to institute rate reductions which *may* prove unprofitable during the early period before the lower prices have stimulated an increased demand.

In order to meet this difficulty, the proposed bill provides two means by which a company may be safeguarded against temporary deficits in its annual earnings. The first device is that of the "Rate Equalization Reserve"; the second is that of a clause permitting to make good during a limited period any losses incurred during previous years.

The rate equalization reserve is a reserve which is to be built up out of appropriations of net earnings until it amounts to 20 per cent of the rate base. The Public Service Commission is instructed to fix rates of charge which will be sufficient to build up this reserve, in a reasonable period of time, to a maximum of 20 per cent. All earnings made by the company in excess of operating expenses plus the stipulated reasonable rate of return must be credited to this

reserve, and all deficits in earnings below the reasonable rate of return must be debited to the reserve.

On the drafting the proposed bill we have had under consideration a type of "automatic" rate equalization reserve which has been adopted in various service-at-cost franchises of street railway companies. This form of reserve calls for a fixed minimum and a fixed maximum reserve, say 5 per cent and 20 per cent respectively. If the reserve falls below the minimum it becomes mandatory for the supervising commission to raise the rates of charge so as to increase the corporate earnings and thus to bring the reserve back to the normal minimum. If, on the other hand, the reserve exceeds the maximum, it becomes mandatory for the Commission to reduce rates until the reserve falls to the stated maximum. Although the appearance of "automatic" control of rates which this type of provision sets up is very appealing, we have thought best to leave matters of the adjustment of rates to the broad discretion of the Public Service Commission, subject only to the statutory instruction that the Commission shall follow the general policy of sanctioning such rates as will build up and maintain approximately a 20 per cent. reserve. Needless to say, there will doubtless be instances where the Commission will be powerless to fix rates of charge that will result in earnings sufficient to yield the reasonable rate of return on investment and also to build up a rate equalization reserve. In these cases, where the traffic will not bear the rates, the Commission will continue to do what it has done in the past—namely, to allow such rates of charge as the economic conditions of the industry permit.

It should be noted that the rate equalization reserve is a "reserve" in the accounting sense of the term and not a so-called "reserve fund" of cash or liquid assets. Ordinarily, the earnings that will be credited to this reserve will be reinvested in the property and will thus go to the building up of the financial strength of the company at the same time that they will increase the capacity of the enterprise to render public service. But since the reserve is to be built up from contributions by the rate-payers rather than from contributions by the investors, it will not constitute an addition to the rate base on which the company may earn an additional return. It may be desirable for a company to invest a small portion of the earnings represented by the reserve in liquid securities which may be sold in order to realize the cash necessary for the payment of dividends during periods when the company's treasury would otherwise make such payments impracticable. The Public Service Commission may permit a company to set up a reasonable "dividend equalization reserve fund" of this nature, although we are inclined to think that such a fund will not generally be needed by a company which enjoys good credit and which can secure necessary funds by means of short-term loans.

The second device which we have provided for as a means of securing stability of return is the clause giving a public utility company the right to make good in any one year any deficit below

a fair return incurred during the three preceding years (Sec. 153 [4]). By this device of the limited accumulation of deficits, we have endeavored to safeguard a company against losses due to temporary conditions of the industry, and due to the original impact of a reduction in the rate schedule, at the same time that we have not gone to the extreme of permitting an unfortunate company to pile up an accrued deficit without limit. The provisions will be especially useful as a means of protecting companies that have been unable, as yet, to build up an adequate rate equalization reserve.

***V. The Contract Option* (Sec. 155)**

In the following section, on the constitutionality of the bill, we state our reasons for inserting an option provision for an express contract by which the state and the contracting companies are free to accept the proposed basis of rate control. A term of twenty-five years is suggested because it is deemed long enough for purposes of developing and testing the plan but not too long to encounter serious danger that the Courts would hold it invalid as an unduly prolonged limitation of the police power of the State. The recapture clause at the end of the period is inserted to safeguard the public against the setting up by the company of new, incremental values when the contract elapses.

***VI. Powers Granted to Municipalities* (Sec. 156)**

The object of subsection (1) is self-evident. Consumers of service, and the municipalities that may represent these consumers, are given the right to participate in all rate proceedings and in the initial valuations that will affect these proceedings.

The object of subsection 2 is to give municipalities the authority to exercise their own discretion as to whether they shall engage in the ownership and operation of utilities or shall remain under private ownership, subject to the new form of regulation.

***VII. To Promote Efficiency* (Sec. 157)**

This section is self-explanatory. We have already discussed the problem of encouraging efficiency in an earlier section of this report.

***VIII. Possible Conflict With Hitherto Existing Statutes* (Sec. 158)**

The provision here made, declaring that any conflict of this nature shall be resolved in favor of the present act, may not be really necessary in view of the common-law rule to the same effect. On this matter the advice of a legislative drafting expert should be taken.

***IX. Effect of Possible Invalidity of Certain Sections of the Act on Other Sections* (Sec. 159)**

In our opinion the validity of the provisions of this Act having to do with the determination of the rate base should not be affected by any judicial decision holding the remainder of the Act invalid.

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***IX. Effect of Possible Invalidity of Certain Sections of the Act on Other Sections* (Sec. 159)**

In our opinion the validity of the provisions of this Act having to do with the determination of the rate base should not be affected by any judicial decision holding the remainder of the Act invalid.

While a definitely established rate base logically fits in with a definitely determined rate of return, the advantage of the former would by no means be completely destroyed by a holding that the rate of return, under the constitutional guaranties of property against confiscation, must be determined in the way in which it has hitherto been determined. We have therefore provided in subsection 1 of this section that the validity of sections 151 and 152 shall "stand on its own feet."

For similar reasons we have distinguished other provisions of the Act whose validity should not, in our opinion, be affected by the possible invalidity of the remainder of the act.

Section 5. Constitutionality of the Proposed Bill

We come now to what is perhaps the most controversial question raised by our proposed plan of rate control, the question of its constitutionality. That this question is a serious one must be evident from the fact that doubts as to constitutionality have been raised, not alone by counsel for the public utilities who do not like the plan and who hope that it will be held invalid, but also by many persons who are friendly to the plan and who would like to see it succeed.

In discussing the problem of constitutionality we must distinguish between two different features of the bill that is here proposed. The first is the mandatory feature of the bill, which makes the stipulated basis of rate control applicable to all electric, gas, water and telephone properties under the jurisdiction of the Commission. The second is the optional provision of an express, written contract between the State and the contracting utility companies, whereby both bind themselves to accept, for a given period of years, the continued application of the scheme of rate control that the proposed statute would now impose upon all companies. Since some legal students have expressed the opinion that the proposed plan of regulation could be adopted by express contract, but not by a mandatory statute, we must consider separately these two questions of law.

I. The Contract Provision

While legal opinion is not unanimous on this subject, counsel for our committee is of opinion that the validity of a type of contract such as is here provided for will be sustained under the State and the Federal Constitution. Such doubt as exists as to this conclusion rests on the reluctance of the Courts to sustain an agreement whereby a legislature waives its police power to regulate public utilities in such a way as the public interest at any time may seem to require. The United States Supreme Court, however, has upheld the validity of franchise agreements whereby a fixed rate for service has been stipulated for, and it has sustained the rates so fixed even though they would be deemed "confiscatory" in the absence of a binding contract. There have been numerous cases, to be sure, in which the Supreme Court has held that a

five-cent fare clause of a franchise is invalid; but in those cases the Court has expressly stated either that the State had not authorized the city to make binding agreements as to the rate of fare and hence that the provision in dispute was not a true contract, or else that the State had voluntarily waived its contract rights in the public interest. The question whether the Legislature of New York State has the power, under the present New York Constitution, to make binding contracts which may restrict its police power is a more difficult one than is the question of mere Federal constitutionality. We accept the opinion of our counsel, however, that nothing in the wording of the State Constitution nor in the judicial interpretations of the constitution by the New York Courts negatives the assumption that contracts of the type in question would be upheld.

But while, on constitutional grounds, the device of a voluntary contract between the companies and the State seems to offer an effective way out of the legal difficulties of securing a new standard of rate control, the practical objections to sole reliance on any such contracts seem to us insuperable. The difficulty lies in the obvious lack of any disposition on the part of the utility companies to enter into a contract that would deprive them of their asserted legal claim to a judicially determined "reasonable return on the fair value" of their property. The evidence before our committee is all too eloquent of the intent on the part of the utilities to fight on this issue to the last ditch. Several representatives of the public utilities, to be sure, have privately expressed a mild willingness to "consider" the possibility of entering into some contractual arrangements. But the whole tenor of the testimony at our hearings reflect the insistent—one might fairly say the defiant—determination of the utility companies to hold to the strategic position which they now occupy under the "present value" doctrine. The jubilant references by the utility companies and by their associated banking interests to certain of the recent Supreme Court opinions like the Baltimore Street Railroad case—a decision which is referred to in a recent investment banker's bulletin as "dispelling the bugaboo of valuation" for the investors—is a clear symptom of the present state of mind of the utility interests. We do not doubt that there may be companies which, acting under the fear of a possible future drop in price levels, could be induced to sign *some* kind of contract that would safeguard their interests against a subsequent fall in the rate base. But the terms of any contract to which they would voluntarily subscribe, as giving them a quid pro quo for their existing opportunities, need only be left to the imagination. It must not be forgotten in this connection, that the basis of control which we hold to be required in the public interest, while it doubtless greatly strengthens the security of the non-speculative investor, frankly deprives the companies of the almost limitless opportunities of speculative profit to which they have been accustomed under the present system. Today the dominant leadership in the utility field comes from persons who represent the specu-

lative interest in these enterprises rather than the investment interest, and no contracts would be accepted by the companies which are not acceptable to this former group.

The only conditions under which the device of the express contract, taken alone, would have a fair chance of success as a means of securing effective control would be conditions under which pressure could be brought upon companies to accept the terms of the contract whether they wished to do so or not. In Massachusetts, where the possible resort to the contract system has been given much attention in recent years, the imposition of such conditions has been considered in discussions before the Legislature. One possible form of pressure that has been suggested is the threat of municipal competition against non-assenting companies. Another, more radical measure would be the refusal by the Legislature or by the Public Service Commission to sanction the issuance of new securities, or to grant certificates of convenience and necessity for new extensions, save to those companies that sign the desired contract. To any lawyer, however, it is unnecessary to point out that there are serious, possibly fatal, constitutional difficulties in the way of a legislative policy which clearly and frankly discriminates between those companies that do and those companies that do not assent to a basis of control different from that to which they would otherwise be subject. In addition, there are obvious practical objections to the use of coercive measures which would withhold from recalcitrant companies the privilege of extension of service and which would therefore react against the interest of the public as long as the companies were willing to hold out against the coercion.

For the reasons just stated, we do not recommend that sole reliance be placed upon the use of contracts as a device for securing adequate control over public utilities. Nothing less than a mandatory law applicable to all companies will, in our opinion, solve the difficulty. Nevertheless, we believe that companies may well be given the option of entering into a contract with the State to accept during a limited period of years the basis of rate control which is provided for in the mandatory statute which we propose.

The question may be raised as to why a contract of this nature is suggested when it applies to the assenting companies precisely the same basis of regulation that will be made mandatory even in the absence of a contract. To this question the answer is first, that the existence of an express contract may foreclose much time-consuming and expensive litigation as to the constitutionality of the mandatory statute, and as to the rulings of the Commission made under the terms of the statute; and second, that it will give to the companies an added assurance that the Public Service Commission Law will not be changed during the term of the contract in such a way as to impair the return to which the new statute would entitle them. As to this latter point, we believe that the rights of investors will be amply protected against an injurious subsequent change in the statute *even without the expressed guarantee of a contract*. Our reasons for so believing are stated in the following section. Nevertheless, the mere fact that a fear to the contrary may exist in the minds of investors, even though this fear is quite groundless, may be sufficient warrant for a provision in the law offering to companies the guarantee of a contract for a limited period of time in case they desire to take advantage of this optional provision.

II. The Mandatory Statute

It is because of our conviction that the contract method, taken alone will prove unavailing that we propose the immediate adoption of a thorough-going mandatory statute embodying a change in the system of rate control as a matter of public policy. We make this proposal in the face of objections from counsel for the companies, that the statute will be held unconstitutional as contravening the right of utility companies to a judicially determined "reasonable return on the fair value" of their property. Our reasons for recommending this action must now be discussed.

Those who deny that the proposal is constitutional base their denial on the ground that the Supreme Court of the United States has repeatedly upheld the "present value" standard. Not only has the court declared positively that a company has the constitutional right to earn a reasonable return on the "fair value" of its property, but it has also stated negatively that this fair value is not synonymous with the money originally contributed by the investors.* Any statute which makes actual cost the determining factor, or indeed any statute which conflicts in any other way with the standard of "fair value" would, it is argued, be held void as a denial of property rights guaranteed by the 14th Amendment to the Federal Constitution. The hands of the Legislature are therefore forever tied, and the public has no alternative but to submit to the existing system of regulation, unless it seems fit to take over the utilities and operate them under government ownership.

We frankly recognize that events may possibly bear out the predictions just stated. Nevertheless, we are convinced that the constitutionality of the plan is by no means as doubtful as many critics have assumed, and we believe that the chances of a favorable holding on the part of the Supreme Court are greater than the chances of an unfavorable one. Persons who deny the constitutionality of our proposal for a statutory revision of the basis of rate control, generally ignore the fundamental difference between the legal issue that such a statute would present and the issue on which the courts have hitherto passed when they have held that a commission may not, in its own discretion, limit utility rates to a return on the actual cost of the property. In order to bring out this vital distinction, it will be necessary to note

* See, for example, the opinion of Mr. Justice Hughes, speaking for the Court in the Minnesota rate cases, 230 U. S., 352, 454 (1915):

"The property is held in private ownership and it is that property and not the original cost of it, of which the owner may not be deprived without due process of law."

briefly the circumstances under which the latter rulings have been made.

It is well known to students of constitutional law that only within comparatively recent years has the Supreme Court held that the 14th Amendment can be invoked by public utility companies to prevent "confiscatory" regulations by a Legislature. At an early time, indeed, the court flatly refused to take jurisdiction, holding that public utilities must look to the Legislature for their remedies.* Gradually, however, the court shifted its position on this point, first by stating that the Legislature might not go so far as to destroy *completely* the opportunity of a company to make a profit,† and later by holding that it might not deprive the company of the right to earn a minimum fair return. The first clear-cut statement of this latter position was made in the famous case of Smyth vs. Ames.‡ That was a case in which several railways sought to have the court declare that certain rates fixed by the Nebraska Legislature were void as depriving the companies of their property "without due process of law." In deciding for the companies the court did not really need to commit itself as to the proper test of reasonableness, for it found the rates so inordinately low as to be confiscatory on any plausible basis whatsoever. In a dictum, however, it did state as follows:

> "We hold, however, that the basis of all calculations as to the reasonableness of rates to be charged by a corporation maintaining a highway under legislative sanction must be the fair value of the property being used by it for the convenience of the public."

In this dictum the court apparently accepted the position of William Jennings Bryan, who as counsel for the State contended that the "present value" of the railway properties and not their book values, purporting to represent their original cost, should govern. The railway companies, on the other hand, had insisted on their rights to a return on book values, since these were much higher than the then current reconstruction costs which were apparently identified with "present values." Book values were higher at that time, partly because they had been notoriously inflated through false accounting, in the absence of any uniform system of accounts, partly because the original outlays for construction had been grossly extravagant as a result of the financial corruption associated with "construction companies," and partly because the price level had fallen since the railway properties had been built.

Just how the court conceived the phrase "value of the property," which it accepted as the proper standard, is a mystery in view of the fact that it enumerated a hodge-podge of "considerations" which must be "given due weight" in the valuation—considerations some of which would have no bearing on current

* Munn v. Illinois, 94 U. S. 113 (1876).
† Reagan vs. Farmers' Loan & Trust Co., 154 U. S. 362 (1894), and other cases.
‡ 169 U. S. 466 (1898).

values in any accurate sense of the word. It is not difficult to understand, however, why the court felt impelled to reject the only suggested alternative criterion, book values, as a basis of constitutionality. Certainly to the extent that these accounting figures were inflated, or that they represented extravagant outlays, they should have been disregarded. But there was no way of determining what the actual, reasonable outlays had been. It must not be forgotten, moreover, that the court was consciously passing on the question of a *constitutional minimum*, of fair rates. It was looking, not for a guide to proper action of a Legislature or Commission in fixing a proper rate schedule, but rather for a guide to its own action in deciding whether the Legislature or the Commission had so clearly abused its discretion as to fix rates below the deadline of confiscation. Assuming that the court was acting wisely in reversing its earlier position by taking jurisdiction at all, one cannot but feel that the choice of some figure lower than "book values," a figure which it called by the convenient though elusive term "value of the property," was the only rational choice.

Since the doctrine of "fair value" became accepted as the "law of the land," following the dictum in Smyth vs. Ames, the earlier conditions which made the acceptance of this doctrine almost inevitable have completely changed. On the one hand, the most impelling reasons for ruling out the alternative of book values or actual costs have been disappearing with the development of uniform accounting system and of commission oversight over public utility outlays. On the other hand, the experience of rate regulation by commissions have abundantly proven that the vague, cumbersome and controversial standard called "fair value" simply cannot play the new role which it has now been forced to occupy. When rates were fixed sporadically by a Legislature, generally by some rough rule of thumb method, a highly indefinite concept, called "fair value," might serve reasonably well to set the very lowest limits of decency in the treatment of railway investors. But when rates are subject to constant readjustment through the continuous oversight of an expert commission, a far more objective, definite and administratively workable test becomes necessary. The need for such a test becomes critical when a combination of economic circumstances together with a series of increasingly liberal decisions on methods of valuation leads, as it has already led, to a situation where "reasonable return on fair value" is no longer a minimum of decency but rather an upper limit which even the most prosperous companies can hardly hope to attain.

Acting under the force of these new circumstances, most public service commissions throughout the country attempted, some years ago, to get rid of the incubus of the "present value" doctrine. They did so, however, not by a flat denial that "fair value" is the proper criterion—for they had no statutory or judicial authority to make this denial—but rather by giving exclu-

sive or dominant weight to original cost as "evidence" of the value of the property. This attempt, however, has been definitely thwarted by the Supreme Court, which has insisted that "fair value" is not synonymous with original cost and that it must be reached by giving "due consideration" to reproduction cost. In taking this stand, the Supreme Court has not had the uninamous assent of its members, as may be seen from the minority opinion (dissenting from the reasoning, concurring as to the result) of Mr. Justice Brandeis in the Southwestern Bell Telephone case,* in which Mr. Justice Holmes joined. The subsequent cases in which Mr. Justice Stone has dissented from the majority position of the court suggest that he, too, may have the same point of view.

Whatever one may think of the merits of the majority and the minority positions on the Supreme Court, one must at least concede that a different holding from the prevailing one could have been taken only in the face of very real and very forceful objections. Granting, as we think one must grant, that "fair value" has outgrown its usefulness as a standard of rate control, granting that a complete change of standards is called for in order to meet the requirements of new economic conditions, one may still believe that the proper remedy for the difficulty cannot be found in an ex post facto holding of an administrative Commission, acting under no authority of the Legislature to institute a new and consistent policy. Viewing the matter solely from the point of view of fair play toward existing investors, one may question the moral right of a commission to make a retroactive administrative order limiting all these investors to a return on the original contributions despite the fact that they had invested their capital under a very different and more favorable understanding of their legal rights.

We have given this brief summary of the circumstances under which the doctrine of "reasonable return on fair value" has arisen in order to make clear what a completely different issue will be presented to the courts by our proposed statute from the issue which has always arisen in previous rate cases. In the first place, the bill which we have drafted by no means restricts existing investors to a return on the actual capital hitherto contributed to the public service. On the contrary, it directs the Commission to establish a fixed initial valuation for present property which will take reasonable account of all the various elements that the Supreme Court has required to be considered in a valuation for rate making purposes.

Thus the unfair aspect of a retroactive law is carefully guarded against since existing security holders are given the right, in perpetuity, to earn a fair return on the increments in value to which the hitherto prevailing "law of the land" has entitled them. To be sure, the opportunity of enjoying still further increments is foreclosed by the new law, but against this must be offset the fact that

* Southwestern Bell Telephone Co. vs. Public Service Commission, 262 U. S., 276 (1923).

the liability of suffering through a decrement is also removed. We submit that a situation such as we have just described is so vitally different from the fact situation under which the Supreme Court has had occasion to apply the doctrine of "fair value," that it presents a completely new problem of constitutional law—one that cannot be said to have settled as *res adjudicata*.

But the law which we propose differs in a still further respect from these holdings of a Public Service Commission that have already been held to be unconstitutional. A Public Service Commission being merely an administrative body without power to change existing statute law or existing common law, is in no position to assure a public utility company that a future Commission will not revert to the doctrine of "reasonable return on present value" if the "present value" of utility properties should fall below actual cost. All that it can do is to go through the pretense of finding that the "fair value" of the property in any one rate case is "measured by" historical cost. It cannot set up a frankly new legal standard of investors' rights—a standard which may start with "fair value" of existing property as an initial rate base but which openly refuses to rewrite the rate base as this "fair value" changes in the future.

The Legislature, on the other hand, has a far wider power than an Administrative Commission to establish a definite program of public policy and to assure investors that the program will be carried out consistently and continuously instead of being applied simply in those individual rate cases where it happens to work directly in favor of the rate-paying public. This does not mean that even the Legislature is empowered to deprive a utility company of its constitutional rights to protection against deprivation of property "without due process of law." But it does mean that the Legislature may adopt a large, consistent program of regulation under which a Commission may take action—sometimes relatively favorable, sometimes relatively unfavorable to a public utility company—which, if considered purely and simply on the basis of an isolated rate case would at times contravene the rights of a utility company. We think it too clear for serious argument that, in law, no less than in the everyday conduct of human affairs, action which may be grossly unfair, and therefore unconstitutional, if it were applied only when it redounds to the benefit of a particular interested individual, may be fair and therefore constitutional when it is applied without discrimination in the interest of the public as a whole.

By implication, counsel for the utility companies admit the very point which we here emphasize in drawing a distinction between an isolated rate case and a consistent program of public policy. So far, at least, as appears from their memorandum to our Commission, counsel for the Consolidated Gas Company do not deny the inherent fairness of a plan of rate control of the type which we here propose, so long as assurance can be given that it will not later be rejected by the Legislature itself in case it should turn

out to be more favorable to the companies than would the "fair value" rate base. They do insist, however, that the Legislature has no power to bind itself not to go back on its own policy if it later chooses to do so.

Our answer to this objection, however, is twofold. In the first place, we are unwilling to assume that the New York Legislature, after once announcing and establishing a definite form of rate control as a matter of public policy, and after encouraging the investment of capital on the faith of the policy here announced, would so far betray its good faith with the investing public as to renounce its promises whenever it became convenient to do so as a matter of political expendiency. Certainly the history of legislation in this State gives no good ground for the fear of any such betrayal of political decencies. But in the second place, we believe that, if a Legislature were indeed to attempt any action of this kind, the rights of the investors would be protected by the Courts under the constitutional guaranties against the deprivation of property "without due process of law."

Contrary to the assumption of many utility lawyers, the "due process clause" of the Federal Constitution is not a clause protecting property rights against a violation of purely technical "legal rights." It is rather a clause designed to protect property owners against grossly *unreasonable, unjust* action on the part of the legislative branch of the government. The Supreme Court has constantly recognized the futility of attempting a definition of "due process." A study of the long line of cases in which the Court has interpreted the due process clauses shows that two dominant ideas underlie what the Court conceives to be those fundamental considerations of fair dealing which constitute "due process," namely, (1) freedom from *arbitrary* or *wanton* interferences, and (2) protection against *spoliation* of property. Against that which seems "arbitrary," "wanton" and "spoliative" to the common feelings of justice, the due process clauses afford protection to utility companies. But these companies are protected only by the application of the *general* protections of the due process clause, namely, protection against arbitrariness and against spoliation. In the case of utility regulation, this protection has been summarized as protection against "confiscation." The protection thus accorded is of high importance. But one should never forget the very narrow issue that alone comes before the Court—the issue of abuse by the legislature of its rights and duty to regulate utilities by ruthless action, taken without regard for those economic interests which make the profitable conduct of a utility possible.

Therefore the Supreme Court has declined to commit itself to any technical rules or to any technical formulas in regard to rate regulation. It has never committed itself to any specific formulas for determining the bases of the rate structure, or to the means of fixing rates, or of determining what is a fair rate. It has merely indicated some of the factors that make up the total result. Not only has the Supreme Court refused by specific formula to

define its conception of "confiscation." It has done the very reverse. The cases unquestionably demonstrate that it has treated the issue of confiscation as a question not of technical law, but of basic fairness and justice. In the case of *Smyth* vs. *Ames*, after enumerating the various elements which enter determination of the rate base, the Court recognized that the ultimate question is a question of what is "just and right"—not technical criteria of technical law, but standards of fair dealing calling for an exercise of reasonable judgment. And so in the *Minnesota Rate Cases*,* the new Chief Justice spoke for a unanimous Court when he ruled that value is "not a matter of formulas, but there must be a reasonable judgment having its basis in a proper consideration of all relevant facts." Nowhere, indeed, has the exact nature of the issue in these rate controversies been more pithily put than by Chief Justice Hughes in his book on the Supreme Court:

> "The Supreme Court has said that the ascertainment of fair value is not controlled by artificial rules. It is not a matter of formulas, but there must be a reasonable judgment having its basis in a proper consideration of all relevent facts. This involves, under the rule of *Smyth* vs. *Ames*, a very broad inquiry. But, in applying these principles, it is recognized that the rate-making power is a legislative power and necessarily implies a range of legislative discretion. The Court does not sit as a board of revision to substitute its judgment for that of the Legislature, or of a Commission lawfully constituted by it, as to matters within the providence of either. The question is whether the State has overstepped constitutional limits by making rates so unreasonably low that they must be regarded as confiscatory. (The Supreme Court of the United States [1928], 220.)

Concededly the State is confronted with extremely complicated problems in devising an effective system of rate regulation. It must reconcile the community's dependence upon utilities with the necessity of securing for these utilities the incentives and financial resources to enable them adequately to serve the community. In working out such a system, the State may follow the guidance of economic and administrative experience. It is untrammeled in the formulation of its policies and in their execution so long as it does not provide for a system which makes rates "so unreasonably low that they must be regarded as confiscatory." But whether or not the system which it is devising for determination of rates makes for confiscatory rates, is a question to be determined by those considerations of economics and business judgment which are relevent to the determination of these issues. And these considerations, we have seen, are not of a technical nature, but turn on those standards of good sense by which men of fair judgment decide whether utilities are treated in ways that are arbitrary or spoliative.

* 230 U. S., 352, 434.

In further support of the view that a statutory amendment to the public service law, definitely setting the standard of rate control, need not be ruled out of consideration as unconstitutional, we would refer to a recent communication from the Interstate Commerce Commission to the Interstate Commerce Committee of the United States Senate on the subject of railway valuation. This communication,* which was signed by Commissioner Eastman, and Woodlock concurred in the point now at issue, recommends that Congress stipulate the basis by which the Commission shall value the railway companies for purposes of rate making and for purposes of the Recapture Clause of the Transportation Act. The treatment by the Commission of the constitutional aspects of the question is directly in point as applied to the bill which we now propose, and we strongly commend this report to your honorable body as an able presentation of the legal question involved here.

In recommending the adoption of the proposed bill, we are all the more ready to recommend that the risk of constitutionality be be taken because of our conviction that effective regulation of private utility enterprise is quite out of the question as long as the doctrine of "reasonable return on fair value" persists. So clear is our conviction on this point that, if the necessity of submitting indefinitely to the "fair value" standard were to be assumed, we should be ready to recommend to your honorable body *the immediate adoption of a policy looking toward governmental ownership of the utilities of New York State.* Indeed, we are not at all sure that such a policy will not sooner or later become inevitable in view of the inherent difficulties of any system which attempts to combine public control with private ownership and operation. But this is a question that may well wait upon the degree of success which may attend a new effort to make the system of Commission regulation truly effective.

* Letter of Honorable Joseph B. Eastman, Chairman, Legislative Committee, Interstate Commerce Commission, to Honorable James Couzens, Chairman, Committee on Interstate Commerce, United States Senate, Washington, D. C., dated January 20, 1930.

PART III

PROPOSED AMENDMENT TO PUBLIC SERVICE COMMISSION LAW

Article IX. Establishment of New Policy for Rate Making

Sec. 150. *New policy of rate control.* Be it hereby declared that upon the adoption of this Act it shall be the policy of the State of New York to inaugurate and maintain a new system of rate control as hereinafter set forth, applicable to all electrical, gas, water and telephone properties subject to the jurisdiction of the Public Service Commission—a system designed clearly to define, establish and preserve the rights of public utility investors to a reasonable return on their investments, as well as to assure to the public reasonable rates and to provide for the expansion of properties and service according to public needs. This Act as a whole and its individual provisions are to be interpreted in the light of the following circumstances which have led the Legislature to conclude that the hitherto prevailing system of rate regulation is ineffective and unsatisfactory:

(a) The standard of rate control which has hitherto been applied by the Public Service Commission, acting under the provisions of the Public Service Commission Law and under the rulings laid down by the Courts, had been based on a concept, "reasonable return on the fair value of the property," which has no precise meaning as defined either by the Commission or by the Courts, and which has therefore been dependent on the weight arbitrarily assigned to various "elements" of valuation by the rate-fixing authority: hence, that the determination of the amount on which a company is entitled to earn a return has been subject to constant dispute as to both principles and facts; has fostered conflict of interest and ill-feeling between the companies and the public; and has made the administrative procedure of rate regulation cumbersome, expensive and ineffective.

(b) That the "fair value" of the property to which each company is entitled has been a highly variable quantity, subject to reappraisal with changing construction costs and with changing conditions of the property, with the result that the Public Service Commission has found it impossible to secure and keep up to date the appraisals of the multitude of properties under its jurisdiction, without which appraisals rates cannot be effectively regulated under the hitherto prevailing tests of reasonableness; and that, in consequence, neither increases nor decreases of rates have been effected with the promptness or the accuracy required for the proper protection alike of the companies and of the public.

(c) That, although the control of rates by reference to a "reasonable return on fair value" subjects public utility companies, is wholly unadapted to accommodate itself to such fluctuations

return, the financial structure of the vast majority of these companies, and of the holding companies which control these companies, is wholy unadapted to accommodate itself to such fluctuations because of the fact that it is composed largely of securities with a fixed, contractural rate of interest or dividends; hence, that as the "fair value" of a public utility property changes, there is a disproportionate change in the return available on the common stock —a circumstance which has made public utility securities far more speculative than the conditions of the industry require, and which has made the availability of capital dependent upon the offer to investors of opportunities for speculative profits.

(d) That in providing for control of public utilities by the Public Service Commission, the State intended to assure the public reasonable rates, to permit investors to secure a fair and adequate return, to preserve financial stability among the companies, and to make available new capital funds as reasonably needed for the public service; that these purposes have not been, and cannot be, reasonably achieved under the hitherto existing system of control, because of the indefiniteness and variability of "fair value" and rate of return; and that in order to realize the above stated objects, it is essential to establish a definite and objective standard by which to measure the returns to which public utility investors will be entitled in the fixing of rates for the public.

SEC. 151. *Initial valuations.* As the first step in establishing a system of rate making to meet the above stated conditions, the Public Service Commission shall make an initial valuation of every property as of the date of adoption of this Act. It shall include all used and useful units of property, and shall give due consideration to every element properly considered under the law of the land, including actual cost of the properties, reproduction cost, general expenditures, depreciation, going value, and any other relevant factor. The deduction for depreciation shall comprise all types of actual depreciation, including physical wear, inadequacy, obsolescence and other functional causes. The Commission shall give proper consideration to the fact that the initial valuations shall remain fixed for the future with respect to the properties then existing. When once definitely determined, no such initial valuation of any property shall be subject again to redetermination, either because of higher or lower prices, varying costs of construction, or other conditions.

2. The Public Service Commission shall create a Bureau of Valuation, which shall assemble and interpret the facts required by the Commission in determining the initial valuations. The cost of maintaining the Bureau shall be paid through special taxes levied upon the companies subject to this Act, in proportion to their operating revenues as defined in the Uniform System of Accounts prescribed by the Commission. Annual budgets for the Bureau shall be submitted by the Commission as for other departments, including a statement of revenues for the several companies, provided that the consolidated revenues, with the elimination of intercompany items, shall be presented where two or more operating companies constitute a single operating system. The tax rate for each year shall be based upon the revenues of the preceding year, and the taxes shall be collected in the same manner as other taxes of the State.

3. By order of the Commission, the Bureau of Valuation shall require each company to supply a complete inventory of all the properties used and useful in the Public Service as of the date of the initial valuation, classifying the properties by units according to the Uniform System of Accounts, and according to municipalities or other appropriate subdivisions, giving the date of installation and the actual cost of the various units installed since the adoption of the Uniform System of Accounts, in 1909, together with such other data as may be deemed necessary for proper determination of the various factors entering into the valuation. The Bureau shall make such checks of the inventories, reported costs, and other matters, as may be required to assure reasonable accuracy. It may establish unit prices of reproduction cost for the various classes of property, giving due regard to attainable economies in reproducing each entire property at the date of valuation. It shall prescribe such forms and procedure and employ such practical expedients as will facilitate the work of valuation and properly assure just results for both the companies and the public at large, with due recognition of the fact that fairness does not depend upon extreme detail of data, but upon reasonable classification, grouping, and evaluation of facts. It may make use of all accounting records which properly represent actual cost and unit prices at the date of valuation, and, so far as may appear practicable, it may make use also of all valuations that have been made by the Commission in recent years, or fixed by the Courts, in connection with previous rate adjustments, security issues, consolidations or other relevant proceedings. It shall have access to all properties and records of the companies and shall have power to obtain all facts deemed necessary for the proper establishment of the initial valuations.

4. The Bureau shall submit to the Public Service Commission its reports and findings for each property, including all data, records and computations which have relevancy for the determination of the initial valuation. The Commission shall also receive such material evidence as may be submitted by the companies, municipalities and other interested parties. The Bureau shall render such assistance to municipalities and consumers as may be reasonably requested by them for the proper presentation of facts from the public standpoint. All evidence placed before the Commission shall be presented at public hearings, and shall then be subject to cross examination by interested parties. After the submission of the data by the Bureau, and upon the conclusion of the hearings, the Commission shall fix the initial valuation for each operating company, including all used and useful property, subdividing the amount by ownership according to appropriate units under the Uniform System of Accounts, and according to municipal or other

desirable subdivisions. All the valuations shall be completed within three (3) years of the adoption of this Act.

Sec. 152. *Accounting and Investments made Subsequent to Initial Valuations.* 1. The initial valuation of each property, when once completed and adopted by the Public Service Commission, shall be kept by the Commission as a public record. It shall be entered in the property accounts of the company, and the accounts shall be rewritten accordingly, including all used and useful property, whether owned or leased by the operating company. The Commission shall make such revision of the Uniform System of Accounts for each class of utilities as to provide for suitable distribution of the initial valuation and subsequent property costs with respect to different ownership, different localities, and different functions or parts of the service rendered.

2. To the amounts entered in the accounts of each company for the initial valuation there shall be added subsequently the actual and reasonable cost of new properties constructed or installed for use in the public service. Records shall also be kept of the date and methods of financing each addition to capital investment, as well as of the date and methods of financing all operations of refunding, consolidation, merger or reorganization. If, after the initial valuations have been made and entered into the accounts as herein provided for, properties are then leased or purchased by a company from another public service corporation, or are acquired through consolidation, merger or reorganization, the additions or entries to the property accounts shall not exceed the amounts, less accrued depreciation, at which the properties had stood in the accounts of the predecessor company or companies, provided that all the accounting adjustments shall be subject to determination and approval by the Public Service Commission. Upon the retirement or other disposition of any unit or property, its book entry (initial valuation or original cost, or as entered by approval of the Commission) shall be credited to the appropriate account.

3. The Public Service Commission shall exercise strict control over all additions to and deductions from the property accounts. To facilitate such control, it shall require the companies to formulate and place before it expansion programs for approval in advance of construction, provided that "minor" additions and improvements as defined by the Commission may be made without such prior approval, and provided that a suitable procedure be adopted to expedite approval or disapproval. In authorizing additions to the property accounts, the Commission shall exclude all unreasonable and extravagant costs and all profits obtained by any controlling or affiliated corporation through sale of materials, equipment, or work of construction. It shall not authorize the construction or acquisition of any property where cost is not justified in the public interest.

4. The properties of each company shall be fully maintained through current charges to operating expenses for ordinary maintenance and depreciation. The annual allowance for depreciation shall include all causes which reduce the service life of property, and shall be so determined as to include proportionately in operating expenses the initial valuation or actual cost of the various units of property during their normal service life. The Commission shall have power to fix depreciation rates and charges so as to carry out the purposes of this Act. The annual depreciation allowance for each company shall be accumulated in a separate reserve, to which shall be credited the current accruals, and from which shall be deducted the initial valuation or actual cost of each unit of property withdrawn from service. The reserve shall be credited also with all recovery of salvage upon the disposal of property, and shall be charged with the cost of removal of property, unless such costs are included directly in operating expenses.

5. The rate base as of any time shall be equal to the sum of all the balances of the accounts representing property used in service, less the amount of depreciation reserve, and less all other reserves which have been accumulated under the supervision of the Commission for various operating purposes, including the balance of undistributed returns and the rate equalization reserve hereinafter provided for. The Commission shall issue accounting orders which will result in showing for each company at any time a single sum for the rate base. This shall be at all times an exact sum based upon ascertained facts under the supervision of the Commission, to be maintained as a continuous administrative matter. If, through special disaster, the depreciation reserve is not adequate to provide for all property losses, the deficiency shall be set up under a special suspense account and may be amortized subsequently during a reasonable period, or the losses may be reasonably divided between the depreciation reserve and such special account; but there shall be no deduction from the rate base because of unforeseen destruction of property.

Sec. 153. *Rate of Return.* 1. Inasmuch as the object of this Act is to establish definite rates of return to which each class of investors in public utility properties may be entitled, and inasmuch as this object would be defeated by the application of a single "reasonable rate of return" applicable to the entire rate base irrespective of the type of securities outstanding, the total return to which each company is entitled shall be based on the determination of separate percentages upon separate investments. To accomplish this object, the Commission shall first determine a reasonable rate of return upon the entire initial valuation of each company, and in establishing this rate it shall consider the size and type of the property, the financial standing of the company, the actual costs recently incurred by the company in securing capital, and all other relevant data, taking into consideration the fact that the rate of return on the initial valuation, when once fixed, shall not be subject to later fluctuation except in accordance with sub-section 3 of section 153 of the present Act: provided that the Commission in its dis-

cretion may group the various companies with respect to characteristics such as size, type of enterprise, and credit standing, and may fix an appropriate single rate applicable to every company in each group.

2. As additional investments are made subsequent to the date of the initial valuations, the Commission shall fix the rate of return upon each successive addition in accordance with the actual and reasonable cost of capital to the company. For additional investments made through the issuance of notes, bonds and preferred stocks, the return shall consist of the properly determined charges for interest and preferred dividends that the new securities will actually impose upon the company, with due allowance for amortization of discount and premiums. For additional investments made through the issuance of common stock, the Commission shall fix the return on each issue at a rate sufficient to attract the needed capital to the public service, and it shall base the rate for each addition upon the amount of capital actually contributed, and not upon the par value or stated value of the shares; provided, however, that if the capital structure of the company (including the common stock) is brought into harmony with the rate base, and if stated dividends are fixed upon the common stock, then the return thereon may be determined in the same manner as upon preferred stock. With respect to investments made out of the net earnings which the company would be entitled to distribute in interest or dividends, the rate of return shall be determined by the Commission in the same way as upon the issuance of common stock. When once determined, the return applicable on each security issue, or on each reinvestment of earnings, shall not be subject to change, except as provided for in subsection 3 of section 153 of this Act with respect to the refunding or retirement of security issues. If after the initial valuations have been made, properties are then leased or purchased by a company from another public service corporation, or are acquired upon consolidation, merger or reorganization, the returns to be fixed upon such properties shall not exceed the amount or amounts allowed to the previously operating company or companies, and shall be subject to determination and approval by the Commission.

3. Upon the retirement of any indebtedness or of any bonds, preferred stock or other securities bearing a fixed rate of interest or dividends, the amount of return to which a company is entitled shall be diminished by the amount of the reduction in the fixed charge or dividend requirement resulting from the retirement. Any new security issues, or any application of corporate earnings that may be necessary in order to effect a retirement of the old indebtedness or of the old securities, shall entitle the company to secure an additional return computed in the same manner in which the return on new investments is to be computed, as provided for in subsection 2 of section 153.

4. The return to which a company becomes entitled each year as determined in accordance with the foregoing provisions, and subject to the approval of the Commission, shall be credited to a special account and debited to the income account of the year (or to the rate equalization reserve or suspense account as herein provided for, if the income for the year is less than the amount of the return). The return thus separately accounted for, shall be available for any corporate purpose, including the payment of interest, rentals, dividends or other charges which are not includible in the cost of service as hereinafter defined. The income account shall be so classified as to show for each year all the revenues directly or indirectly derived from the operation of the properties used in the public service, and all the operating expenses, taxes and other charges properly included in the annual cost of service prior to the requirement for return; the balance between such revenues and such charges constituting the income of the year available for the payment of return. After the deduction of the return required for the year, the balance of the income shall be transferred and credited to the rate equalization reserve. But if the income for any year is less than the required return, the deficit shall be debited to the rate equalization reserve. If any part of the income credited as return to the company is subsequently reinvested in the public service, the amount, upon the authorization of the Commission, shall be transferred to investment and added to the rate base, and thereafter shall not be available for any other corporate purposes; but it shall be entitled to a return as provided for under subdivision 2 of this section. If the return as determined for any year cannot be obtained in full from the income of the year or from the credit balance in the rate equalization reserve, the deficiency shall be debited to a special suspense account, and shall be included in the charges to income of the subsequent year, provided that no such deficiency shall be accumulated in succession for a period longer than three years and provided that no company shall be entitled to any returns except through rates fixed for service in accordance with the provisions of the following section.

SEC. 154. *Fixing Rates.* 1. As nearly as may be feasible, the Commission shall fix for each company such rates as, together with other revenues directly or indirectly derived from the operation of the properties used in the public service, shall produce sufficient revenues to equal (1) all actual and reasonable operating expenses, including adequate provisions for depreciation and other desirable operating reserves, (2) taxes accrued on, or in connection with the operation of, the properties used in the public service, (3) other charges properly incurred in connection with operation, but not included under operating expenses and taxes, and (4) the return required on the properties. These elements shall be subject to annual determination and approval by the Commission, and shall be considered together as the "cost of service." For the purpose of avoiding frequent changes in rates because of variation in cost of service and volume of business, and in order to furnish all reasonable security and stability for the actual payment of the

return, the Commission shall as soon as possible fix the rates for each company so as to provide for the accumulation of a "rate equalization reserve" which, within a period of ten (10) years, shall be intended to reach a maximum sum equal to twenty (20) per cent. of the rate base. The income of any year in excess of the cost of service shall be credited to the reserve, and the deficiency shall be debited to the reserve. The Commission may make such changes in the requirements for reserve as may be deemed in the public interest, but if the balance of the reserve at any time falls below five (5) per cent. of the rate base, the Commission shall promptly raise the level of rates, if the increase in rates is commercially feasible, with the purpose of bringing the revenues up to the cost of service and to restore the reserve to a reasonable sum consistent with its function; provided, however, that the investors shall bear the risk as to whether rates in the aggregate can be so fixed as to bring the return as intended and provide the stability as contemplated by this Act. All adjustments which may be made in any year with respect to changes included in the cost of service of preceding years, shall be credited or debited to the rate equalization reserve, to the extent that the previous charges prove to be greater or less than the actual payment or liability or proper accrual in any operating reserve. The funds represented by the rate equalization reserve shall be held in trust for the public and shall not be included in the rate base. They may be used for the acquisition of property, or for any purpose in connection with service as authorized by the Commission, but they shall not be held as property of the company and shall never accrue to the benefit of the company through the sale of property or otherwise, except for the safeguarding and stabilization of the return as herein specifically provided for.

2. In fixing rates or approving rate schedules, the Commission shall make or authorize such differentiations in rates between localities and classes of consumers as may be reasonable, giving due regard to differences in cost of service and to the possibilities of promoting greater use and making the advantages of service more generally attainable to the public at large; but it shall not place undue burdens upon the smaller consumers, nor authorize a "service charge" or similar form of rate which will impose fixed monthly charges upon customers for operating expenses and other costs, except as to meter reading, customers' bookkeeping, billing, collecting, and any such similar items due directly to the customers as out-of-pocket costs, and provided that such costs cannot be reasonably or equitably absorbed by the rates charged for gas consumed, electricity consumed, or other utility service consumed. The Commission shall endeavor, so far as reasonable, to bring about uniformity as to type of rate schedules within the State, and to establish like rates for communities served under similar conditions. To facilitate the making of proper rate adjustments, the Commission shall revise the Uniform System of Accounts to present as accurately as possible the cost of the various functions or processes connected with the rendering of service.

3. If a company furnishes two or more distinct utility services (e. g., gas and electricity), it shall fix the rates of each separately in accordance with the cost of service. It shall keep the accounts distinct with respect to rate base, return, and all phases of operation. If it uses any properties or incurs any costs jointly for the benefit of more than one service, it shall make appropriate apportionments to each service, subject to approval by the Commission. Each service shall be treated as an independent utility, and its operations and rates shall be regulated solely with regard to its own activity, and without consideration to financial advantages to any other service.

Sec. 155. *Commission authorized to enter into contracts with companies.* The plan of rate making as above prescribed shall be carried out by the Commission as a matter of law for the purpose as hereinbefore stated. The Commission, however, may proceed to enter into contracts with individual companies, fixing by agreement definite initial valuations and accepting a system of rate making in conformity with the mandatory plan hereinabove and hereinafter established; provided, however, that each contract before becoming effective must have the approval of the Legislature as expressed by appropriate resolution. Each contract shall be entered into for a period of twenty-five (25) years, and shall provide that, during the period of the contract, no rate revisions shall be imposed by the State or initiated by the companies, except as provided for by the contract. At the expiration of each contract, the State, or the municipalities, or other subdivisions of the State within which the properties are located, shall have the right to purchase the property as a whole at a price equal to the rate base.

Sec. 156. *Powers granted to municipalities and consumers.* 1. Each municipality shall have the right to participate in the establishment of initial valuations, and shall also have the right to appear as a party in any action before the Commission or before any court involving rates, service or other matters affecting the municipality or its residents. Individual consumers or associations of consumers may likewise participate in all such actions before the Commission or before a Court, provided that discretion may be exercised in grouping their interests, so as to assure orderly procedure.

2. Every municipality or other political subdivision of the State may establish public ownership and operation as to any utility service for its own use or for general public use within its territorial limits. Such determination of policy shall be made by the municipalities in the same manner and subject to the same powers and restrictions as apply to other public improvements. If any municipality decides upon such a policy it shall provide a suitable department or a special public body to acquire and operate the properties. It may proceed to purchase by means of negotiation, or acquire through condemnation proceedings, the properties of any company already supplying service, or it may construct new properties, if through such new construction it will be able to supply

service at less cost to itself and the public. Subject to the approval of the Commission, any such municipality may extend service to adjoining and nearby communities, under terms and conditions that may be agreed upon by the municipalities or other public bodies affected, or suitable districts may be incorporated for the purpose of establishing public ownership and operation over territory extending beyond the boundaries of a single municipality.

Sec. 157. *To promote efficiency and reduce costs.* 1. Inasmuch as the companies subject to the provisions of this Article are natural monopolies, they escape normal competition and the forces which in other industries result in the advancement of economy and efficiency. In order to encourage economies and efficiency in the operation of the public utilities subject to the provisions of this Act, the Public Service Commission shall carry on continuous investigations as to attainable improvements of plant, equipment and method, and by order or cooperation with the management, shall require the companies to make all such changes as will result in greater efficiency and lower costs to the public. It shall provide for annual or other periodical examinations of the campanies' accounts, covering both capital expenditures, operating expenses and other costs, and shall exclude all excessive and extravagent costs and all unreasonable profits to controlling or affiliated corporations. It shall require the companies to make such exchange or joint use of facilities or service as will avoid needless duplication and effect economical coordination of plant, equipment and operations, provided that there shall be no reduction in the rate base, or of return to any company thus affected, and that there shall be no additional profit or return to any company because of such joint use and coordination. To assure costs to the public, the Commission may require any company to award important contracts under competitive bidding, including construction, equipment, materials and services; and it may establish uniform rules, terms and specifications to procure effective bidding.

2. Since many of the companies subject to the provisions of this Act are under the control of holding companies, and are associated with various affiliated corporations or interests with which they have contractual relations with respect to engineering, financial, legal and accounting services, and through which they acquire materials, plant, and equipment, the Commission shall investigate and determine the reasonableness and propriety of all charges to capital account and operating expenses of any company with respect to any such services, materials, construction and equipment received under contract or otherwise from a holding company or other affiliated corporation. Every such contract shall require the approval of the Commission before it becomes effective, and in granting its approval the Commission shall fix as a condition that all payments by the operating company shall be based upon the actual cost to the holding company or other affiliated corporation, and that the Commission shall have the right to examine the accounts and records of such holding company or affiliated corporation with respect to the actual cost and delivery of such services, materials, construction and equipment. The Commission may reject or require the rescinding of any such contract if upon investigation it determines that the arrangements are not in the public interest.

3. The Commission shall endeavor to bring about such mergers, consolidations and reorganizations of companies as will be in the public interest because of reduction in cost and improvements in service, but it shall not approve any merger, consolidation or reorganization, unless it shall be determined to be in the public interest. As a condition of approval, in order to make possible the most direct control of the rate base and rate of return, the Commission shall require such recapitalization as to bring the securities outstanding in harmony with the rate base. It shall not allow any increase in the rate base or rate or return through any transference of property from one company to another, through sale, reorganization, or otherwise; nor shall it make any reductions unless with respect to the rate of return the cost of money through refunding proves to be less than the rate of return previously fixed, and in that event there shall be a reduction in the return to the extent of such lower cost as determined and approved by the Commission.

4. Inasmuch as the basis of rate control prescribed by this Act sets up definite returns to which the companies are entitled, under reasonable management, and inasmuch as this circumstance raises a problem as to whether some specific device for encouraging maximum efficiency of construction and management should be instituted, be it hereby declared that the present Act is adopted without prejudice to the possibility of later recourse, by amendment of the Public Service Commission Law, to a plan whereby any company achieving a special degree of efficiency may receive a special reward, over and above the return to which it is entitled under the provisions of this Act. For the purpose of making available information and advice by which the Legislature may be guided in determining what, if any, amendments of the above nature are desirable in the public interest, the Public Service Commission is hereby directed to make a special study of the use of devices to encourage efficiency, including the "sliding scale" system of dividends, a "merit rating system" by which the operating efficiency of the different companies may be graded and rewarded, and any other scheme for accomplishing the desired objects that may be deemed worthy of consideration. Nothing in this sub-section shall be taken, however, to prejudice the right of any company to charge such rates as, under reasonable management, will produce the return to which it is entitled under the foregoing sections and subsections of the present Act.

5. Inasmuch as the basis of rate control as prescribed by the present Act may conceivably interfere with the development of considerations of properties that would be in the public interest, because of the fact that it does not permit a consolidated system

to claim a higher rate base or higher rate of return than would be obtained by the properties if operated separately, the Public Service Commission is hereby instructed to study problems of consolidations from the point of view of their desirability on grounds of public interest, and to submit to the Legislature special report as to whether the present Act should be so amended as to give special inducements designed to encourage consolidations.

Sec. 158. *Possible conflict with hitherto existing statutes.* In the event that any of the provisions of the present Act should conflict with any provisions of the Public Service Commission Law as existing prior to the passage of this Act or should conflict with any provisions of any other Statute of the State of New York as existing prior to the passage of this Act, be it hereby declared that the conflict shall be resolved in favor of the validity of the provisions of the present Act.

Sec. 159. *Effect of possible invalidity of certain provisions of this act, on validity of the remainder of the act.* 1. The validity of sections 151 and 152 of this Act shall not be affected in the event that any other provisions of the Act shall be held invalid on constitutional or other grounds.

2. The validity of any contract entered into between a public utility and the State under the provisions of section 155 of this Act shall not be affected in the event that any other provisions of this Act shall be held invalid, nor shall the validity of any other section of this Act be affected in the event that the validity of contracts made under the provisions of section 155 shall not be upheld.

3. The validity of subsection 2 of Section 156 of this Act shall not be affected in the event that any other provisions of this Act shall be held invalid, nor shall the validity of any other provisions of this Act be affected in the event that the validity of subsection 2 of section 156 of this Act shall not be upheld.

4. If any section of this Act, or any subsection, or any part of a subsection, shall be declared invalid, such decision shall not affect any other part of the Act which can be carried out independently of the invalid provision.

APPENDIX

MEMORANDA ON PUBLIC UTILITIES

GREAT BRITAIN
FRANCE
GERMANY
SWEDEN
NORWAY
SWITZERLAND

[423]

FOREWORD

In the belief that the methods of controlling the public utilities abroad might throw light on some of the problems confronting the Commission on Revision of the Public Service Commission's Law the Research Staff was authorized to prepare a report on the laws and procedures adopted in the principal European countries. Memoranda on Great Britain, France, Germany, Sweden, Norway and Switzerland are accordingly presented in the Appendix to this Report. They are based on an analysis of the laws governing utility control in the several countries listed and on official reports and special investigations.

These memoranda were prepared by Orren C. Hormell, De Alva Stanwood Alexander Professor of Government, Bowdoin College. Professor Hormell was attached to the Research Staff for the purpose of this investigation.

APPENDIX

GREAT BRITAIN — PUBLIC UTILITIES

Introduction

The ultimate authority in Great Britain which determines the policy with regard to public utilities is Parliament.

Public utilities are owned and operated by "authorized undertakers" established and regulated by Acts of Parliament and by administrative orders and regulations in accordance with or supplementary to such acts. Such undertakers include, (a) public authorities, (b) private companies (Ltd.) and (c) private individuals. The public authorities authorized to own and operate utilities include boroughs, counties, *ad hoc* authorities for officially created districts, and joint districts acting under joint boards.

Public service "undertakings" are created, first, by Special Act of Parliament. The bill is submitted to a small select committee of the House of Commons enjoined to act with strict impartiality. The committee hears the proponents and the opponents. The hearing before the committee is carried on much as an action before a court of law. Parliament ordinarily follows the recommendation of the committee. By such official acts public utilities are for the most part established and regulated.[1]

Regulatory principles are also found in the so-called "Clauses Acts" which contain standard provisions usually found in every special act establishing a given utility. The enactment of such provisions in the "Clauses Acts" relieves Parliament each year of much detailed legislation and tends also to standardize regulatory measures.

A third method, employed by public utilities, of obtaining powers (or additional powers), is through so-called "Provisional Orders." Under a general act of Parliament authority to grant powers to authorized utility enterprises is frequently provided for. Such grants through Provisional Orders must be confirmed by an Act of Parliament.[2] Water supply and tramways are the more important utilities which obtain powers in such manner.

A fourth method employed especially by electrical and gas enterprises is the "Special Orders" procedure. In the case of electricity special orders are made by the Electricity Commissioners and confirmed by the Ministry of Transport in all cases which prior to the Electric (Supply) Act of 1919 would have been cared for by Provisional Orders or Acts of Parliament.

[1] F. N. Keen, *The Law Relative to Public Service Undertakings*, p. 6.
[2] *Ibid.* p. 7–8.

Parliament has reserved the authority to approve or disapprove such special orders by resolution of both houses.[3]

The fifth method consists of General Acts. It is through general acts that the more important and more enduring principles of public utility regulation are formulated and established. Important among such general acts are.

Tramways Act, 1870,
Railways Act, 1921,
Electricity (Supply) Acts, 1919; 1926,
Gas and Water Works Facilities Acts, 1870; 1873,
Gas Regulation Act, 1920.

Present Situation in British Public Utilities

Water Supply

The water supply is publically owned in practically all of the regular boroughs, in about two thirds of the county-boroughs, and in about half of the urban districts. The water system for metropolitan London was transferred by act of Parliament in 1902 from the private water companies of London to the Metropolitan Water Board.[4]

Any urban or rural authority, with the sanction of the Ministry of Health, may purchase any water enterprise within its district. Right to take private plants by compulsory measures under statutory authority must be obtained from Parliament, but "it has been for many years the settled policy of Parliament not to withold its sanction to applications from urban authorities seeking control of the water supply in their districts."[5]

In a majority of cases the price to be paid is settled by agreement before the measure is presented to Parliament. In case of disagreement the purchase price is determined by arbitration under the Land Clauses Consolidation Acts or under special terms specified in the local act.

Tramways

The major portion of the tramway service is in the hands of public authorities. Private companies, nevertheless, maintain a strong position in many sections of Great Britain. No fewer than eighty such companies were listed as operating in local government areas at the end of the year 1928.[6]

The Ministry of Transport is authorized to grant Provisional Orders for the establishing of tramway enterprises. The consent of the local government concerned must be obtained also if the grant is to a private company, unless the lines run into two or more districts. In this case the consent of each local authority having not more than one-third of the line is dispensed with.

Powers to purchase privately owned lines are given to local governments "upon terms of paying the *then value* (exclusive

[3] *Ibid.* p. 9.
[4] *The (British) Municipal Year Book*, 1929, p. 865.
[5] *Ibid.*
[6] *The (British) Municipal Year Book*, 1929, p. 691–692.

of any allowance for the past or future profits of the undertaking or any compensation for compulsory sale, or other consideration whatsoever) of the tramway, and all lands, buildings, works, materials, and the plant of the promoters suitable to and used by them for the purposes of their undertakings."

Gas Supply

The privately owned gas enterprises enjoy a more secure position than that of the other important utility enterprises. In no case can a municipal gas supply be established to compete with a company exercising statutory power to sell gas to consumers. The purchase of a private gas enterprise by the municipality must be on terms agreed upon by the interested parties.

Gas rates are regulated in the main by maximum provisions stated in the act or order legalizing the enterprise. Such maximum limits upon charges to the consumer often prove to be of little or no protection to the consumer. On the other hand changes in the cost of coal, etc., may make such maximum prices unfair to the company. The Gas (Amending Orders) Rules, 1926, enabled the maximum price per therm to be increased to make up for the increased cost of coal.[7]

Electricity

According to the report of the Electricity Commissioners there were on March 31, 1929, six hundred fifty-nine (659) separate undertakers (enterprises) supplying electricity. Of these 390 were publically owned enterprises and 269 were privately owned (that is by companies or private individuals). Hence it appears that about 60 per cent of the total authorized supply units were public agencies.[8]

The generating plants owned and operated by public authorities generated approximately 5,800,000,000 units, while approximately 3,600,000,000 units were generated by private company enterprises, which is almost exactly the same ratio (60 to 40) as appeared in the number of each class of enterprises.[9]

The relative position of three types of enterprises must be made clear for an understanding of the problems of electrical control and development in Great Britain.

1. The first is the publically owned and operated enterprises which provide almost two thirds of the public supply of electricity.[10]

The predominance of the municipally owned electric undertakings in Great Britain is due largely, first, to the fact that the municipalities entered the field in the early days of electrical development before the private companies had obtained a secure hold upon the industry; and second, to the fact that on the

[7] *Ibid.* p. 687.
[8] *Ibid.* p. 885.
[9] Electricity, Commissioners (British), *Ninth Annual Report, 1st April 1928 to 31st March*, 1929, p. 6.
[10] *Ibid.* p. 7.

whole municipal ownership and operation had proved successful.[11] It is generally conceded that the electricity departments of the great industrial cities such as Manchester, Liverpool, Birmingham, Glasgow and Edinburgh, have given proof of initiative, enterprise, judgment, and efficient management equal to that found in the best private undertakings.[12]

In consideration of the above mentioned facts muncipalization of the great public utilities in Great Britain have not met with the adverse public opinion which has been so pronounced in the United States. Many of the leading conservatives who oppose national socialism consider muncipal socialism to be merely "good business."

Successful municipalization of the electricity industry has been and still is conditioned upon the existence of a trained, permanent expert at the head of the industry. Fortunately for the English municipalities it seems never to have occurred to the Englishman that the tenure of administrative officials should not be permanent. For example, the notable development of electricity at Bristol and in the area around the mouth of the Severn is credited largely to Mr. H. Faraday Proctor, "who has been in charge of the Bristol Electrical Department for thirty-four years."[13] This example is typical, rather than exceptional.

Municipalities, to a marked degree, have been incapable of meeting the national demand for electrical generation and interconnection. The reason is that with few exceptions municipalities have been given authority to supply electricity only to the area under jurisdiction of the local government. Since municipalities in Great Britain are corporations of limited and enumerated powers they can do only what has been expressly granted by law. Municipal jealousies and the opposition of private interests have prevented the granting of extensive powers for the territorial expansion of municipal electrical enterprises.

Prior to 1926 the municipalities were handicapped in buying the private enterprises within their territory by the purchase clause in the Act of 1888 which provided that the property should be bought "upon terms of paying the *then value* of all lands, buildings, works, materials, and plant of such undertakers suitable to and used by them for the purpose of their undertaking within such jurisdiction." The "then value" in actual practise became the reproduction value at the time of purchase.

As pointed out below this defect was remedied in part by the Act of 1926.

The policy of requiring underground cables instead of overhead wires was a further handicap to extensive development. This defect is now being remedied by the Central Electricity Board.

2. The second type of enterprise is the private distributing company. Such companies receive their authority from the electric lighting acts of 1882 and 1888, and from Special Orders. These companies are handicapped to about the same extent as are the municipal enterprises with regard to limits of the area of supply and limitations as to overhead wires, etc. Their normal development probably has been retarded to some extent by the purchase clause of the laws of 1882 and 1888 which always placed over their heads the possibility of municipal purchase. Hence it is claimed "that so long as the length of the tenure and the terms of purchase remain uncertain it is practically impossible for many small distributing companies to face large capital outlays or contemplate extensions."[14]

[11] A portion of the next five pages is adapted from the author's article in *Supplement to the National Municipal Review, June*, 1928.
[12] E. D. Simon, *City Council from Within*, pp. 13; 173.
[13] *Municipal Journal*, Jan. 28, 1927, p. 119.

3. The third type of enterprises is the electric power company. These companies date from about 1900. They have been granted special powers of supply over large areas, especially in the great industrial districts such as Newcastle-upon-Tyne, and Lancashire.

These companies generate electricity on a large scale and supply it in bulk to the distributing enterprises. They supply energy, directly, also, to large manufacturing and industrial concerns.[15]

The power companies have held a highly advantageous position in the industry: First, because their powers were perpetual in tenure, not being subject to the purchase clause of the Act of 1888. Second, they were protected against loss from unprofitable extensions by a binding contract relative to a minimum period of supply, and a minimum return on the actual investment incurred in the extension. For example, authorized undertakers before receiving a supply in bulk were required to agree to continue the supply for a period of at least seven years and pay annually for the supply an amount equaling not less than 20 per cent. "on the outlay incurred by the company in making provision for the supply."[16]

Third: Through stock ownership and interlocking directorates, many of the large power companies have been able to control within certain large industrial areas not only the supply of power in bulk but its distribution as well.

For example, the Newcastle-upon-Tyne Electric Supply Co., Ltd., one of the largest and most successful British power companies through ownership of the stock of a large number of distributing companies controls and actually operates the distribution as well as the generation of electricity "throughout an area of over 1,300 square miles embracing practically the whole of the industrial area of the north-east coast."[17]

The concentration of control, however, is not confined to districts; it is becoming national (in some instances international) in extent. This centralizing tendency in the private electricity field is being advanced not only by the ownership of stock but also (and especially) by the creation of interlocking directorates.

[14] *Advisory Committee on Domestic Supply of Electricity, and Methods of Charge*, 1927, p. 21.
[15] Hugh Quigley, *Electrical Power and National Progress*.
[16] F. N. Keen, *The Law Relating to Public Service Undertakings*, p. 255.
[17] Garcke, *Manual of Electrical Undertakings*, Vol. XXIX, 1926–25, p. 679.

National Policy for the Development of Electricity

Facing the situation as explained above, Parliament in 1926 attempted to break with the past and recast the whole system of control and regulation in the field of the generation and transmission of electricity.

The main purpose of the Electricity Act of 1926[18] was "to secure the eventual concentration of generation in a limited number of well placed interconnected stations, operated under unified control."[19] Mass production in highly efficient super generating stations was to be an essential feature.

The means and instrumentalities created for the realization of the above purposes are:

First, creating power zones approximately co-terminus with the several great industrial districts, within which zones electrical generation and transmission may be thoroughly co-ordinated and unified.

Second, interconnecting the power zones throughout Great Britain as rapidly as it is economically practicable, to the end that eventually the whole of Great Britain may become a network of transmission lines ("gridiron") into which power may be poured from all available sources. Such interconnection, it is predicted, would produce a marked saving in fuel consumption, and a noteworthy reduction in capital expenditures which would result from an improved load factor, and from a reduction in the amount of necessary reserve plant.

Third, regulating prices both to the distributor and to the consumer.

Fourth, standardizing frequency in order that the economical flow of electric energy throughout the nationwide network of transmission lines might be brought about.

Fifth, creating a Board of a private rather than a public character to supervise and regulate the generation and transmission of electricity, and to cooperate with existing agencies in putting into effect the reorganization of the electricity industry.

The supply of electrical energy was conceived to be a national duty to be realized through nationwide cooperation and state regulation. The board created for this purpose by the act is the "Central Electricity Board." The Central Electricity Board possesses the essential characteristics of a board of directors of a limited company (private corporation in the U. S. A.) rather than those of a bureau of the government, since it is responsible for its acts to the courts rather than to the ministry. Its chief functions are to carry into effect the "schemes" prepared by the electricity commissioners. The electricity commissioners decide upon the territory to be included in a given "scheme," and choose the generating stations which are to be the "selected" stations for generation in the district covered by the "scheme"; then the Board provides

[18] *Electricity (Supply) Act*, 1926, (16 and 17 Geo. 5, Ch. 51).
[19] Sir Harry E. Haward, *Local Authorities under the Electricity (Supply) Acts*, in Public Administration, Jan. 1928, Vol. VI, p. 42.

for the building of transmission lines to connect selected stations one with another and with the distributing "undertakers."[20]

When the "scheme" is perfected the board purchases, at the cost of generation, the electrical energy generated by each of the "selected" stations. The board may also purchase "by agreement" surplus electricity from any available source,—such available source at present being especially water power and waste heat plants. The electricity thus pooled and poured into the network of transmission lines is then resold in bulk to the several distributing agencies in the district to be distributed by them to the consumers.

The board is authorized to borrow, on the issue of stock to the public, not more than £33,500,000 for putting the plan into effect. A large portion of that sum will be of necessity used for building the high-tension main transmission lines, and for transforming equipment in order to secure standardization of frequency. The National Treasury is authorized to guarantee the interest and principal of such loans, but it is the intention ultimately to pay off the loans from the profits of the industry.[21]

How the National Policy is Being Put Into Effect

The two agencies entrusted with the function of putting the national policy into effect are: First, The Central Electricity Board created by the act of 1926, and second, the Electricity Commission created by the Act of 1919.

The Central Electricity Board, in law, is similar to any "authorized undertaker" and is responsible for its acts to the court and not to political departments of the government. The Board consists of eight members appointed by the Minister of Transport for a term of not less than five or more than ten years, reappointment, however, being permitted.

The Board first appointed in 1927, includes members representing manufacturers, electrical enterprises, both public and private, labor, commerce, and banking interests. Administrative ability, business acumen, and knowledge of commercial needs were the qualifications sought after.

The Electricity Commission created by the Law of 1919[22] consists of members not to exceed five in number, appointed (now) by the Minister of Transport. Unlike the Central Electricity Board the Commission is a purely governmental body responsible to the responsible ministers.

It is necessary here to limit the consideration of its functions to those connected with the execution of the national electricity policy.

Steps in the execution of the plan:

The initial steps in the reorganization of the electricity industry are entrusted to the Electricity Commissioners. The Commissioners

[20] The term "undertaker" is used in British Law to connote a body having statutory authority to engage in the industry. The term includes both public and private bodies.
[21] *Electricity (Supply) Act*, 1926 (16 and 17 Geo. 5, Ch. 51, Secs. 26–29.
[22] *Electricity (Supply) Act*, 1919 (9 and 10 Geo. 5, Ch. 100).

select the area to which an electricity scheme is to be applied, and prepare the details of the scheme. The proposals for the scheme presented by the Commissioners relate to the following matters:

1. The areas to which the scheme relates.
2. What generating stations have been chosen to be the "selected stations" at which electricity shall be generated for the purposes of the Board. These stations may include both the selected stations from among existing stations, and new stations to be erected. The commission may not, however, select any stations nor authorize the acquisition of main transmission lines belonging to any railway company, canal, inland navigation, dock or harbor undertakers, or private (non-statutory) generating stations without the consent of the owners thereof.
3. Provisions for main transmission lines to interconnect the selected stations one with another and with the systems of authorized undertakers.
4. Provisions for the standardization of frequency. It is not required by the law to install a general standardization of frequency, but only such standardization as is essential to carrying out the interconnection within the proposed scheme.
5. Such supplemental and incidental matters as appear necessary or expedient for any of the purposes of the scheme, especially such as relate to temporary arrangements to be in effect during the execution of the scheme.[23]

Adoption of Electricity Schemes

The scheme as prepared by the Electricity Commission is submitted to the Central Electricity Board for their consideration. The Board before finally adopting the scheme must publish it, and give consideration to any representations made by any authorized undertakers or other interested persons. After due consideration they may adopt the scheme with or without modification, and for the whole or only a part of the specified areas as they see fit.

The scheme as adopted and published by the Board does not go into effect in its entirety until opportunity has been given for complaints, on the part of authorized undertakers upon whom obligations have been imposed, to be referred to the arbitration of a barrister. Such complaints may be made by authorized undertakers who consider that the carrying out of the obligation would be prejudicial to them. The arbitrator is a barrister qualified for judicial office (of not less than ten years standing at the Bar) selected by the Minister of Transport from a panel of barristers nominated by the Lord Chancellor and the Lord President of the Court of Sessions.[24]

The arbitrator, if he deems it expedient, may call in the aid of technical assessors. If satisfied as to the justice of the complaint the arbitrator may order the scheme to be amended to meet the objections or he may order pecuniary compensation to be made. It is provided, however, that he may not grant any relief other

[23] *Electricity (Supply) Act*, 1926 (16–17 Geo. 5, Ch. 51), Sec. 4.
[24] *Ibid.* Sec. 4, Sub-sec. 3.

than pecuniary compensation in any case where the Central Electricity Board certifies "that the grant of such relief would conflict with the basic principles of the scheme or prejudicially affect its efficiency."[25]

Schemes also may be altered or modified from time to time through the same procedure as is used in preparing and adopting the original scheme, with the priviso, however, that no station which has been once selected may be dropped without the consent of the owners. The steps so far described are merely preliminary to the actual working of the scheme. The function of operating the scheme when finally adopted is vested primarily in the Central Electricity Board.

Electric energy, according to the plan, is to be generated as efficiently as possible in a few large stations. It is intended ultimately (by 1940 if possible) to reduce the number of generating stations in Great Britain from about 600 to 50 or 60. The methods of supply are adopted and extensions and alterations of the stations are made according to the requirements of the Board. The Board also determines the quantity of energy to be generated by each selected station and the rate of output.

All of the energy which is thus generated is sold by the owners to the Board, which in turn re-sells it to the "authorized undertakers" who have the statutory authority to distribute energy to the ultimate consumers.

In case the owner of a selected station refuses to operate the station under the direction of the Board, or refuses to carry out the alteration and extension required by the Board, the station may be purchased from the owners.[26] The price to be paid for the station is arrived at by an auditor appointed by the Electricity Commissioners. The auditor is required to certify the sum which has been "the amount of expenses properly incurred on and incidental to the provision of the generating station . . . less depreciation on a scale fixed by Special Order."[27]

It should be noted, however, that the Board is not to acquire the station for itself until it has given full opportunity of purchase to the authorized undertakers in the district, first opportunity to be given to a joint electricity authority if there be such in the district. The private owners are further protected against an unfair forcible purchase by the proviso that if the owners of the generation station or the board are dissatisfied with the sum certified by the auditor the case may be referred for arbitration to a barrister;[28] and by the further proviso that the order of the Minister for completing the transfer of such a station "shall not come into force until it has been laid before each House of Parliament and if either House of Parliament before the expiration of that period presents an address to his Majesty

[25] Electricity Commission, *Memorandum on the Provisions of the Act (Electricity Supply Act)*, 1926, p. 4.
[26] *Electricity (Supply) Act*, 1926 (16–17 Geo. 5, Ch. 51), Sec. 5, Sub-sec. 2.
[27] *Ibid.* First Schedule.
[28] *Electricity (Supply) Act*, 1926 (16–17 Geo. 5, Ch. 51), Sec. 5, Sub-sec. 2, and First Schedule.

(vetoes the proposal) no further proceedings shall be taken thereon."[29]

In case the Board acquires the generating station, the Board is further forbidden to operate the station "unless it satisfies the Electricity Commissioners that it is unable to enter into an agreement with any authorized undertakers or other company or persons to operate it on reasonable terms," first opportunity again to be given to a joint electricity authority.[30]

The erection of new stations may be required by the scheme formulated by the Electricity Commissioners. The Board is denied the authority, however, to erect or operate a new station unless and until the Commissioners are satisfied that no other body may be found with whom satisfactory arrangements to perform the service may be made.[31]

The act provided that uneconomical stations may be closed down by order of the Electricity Commission upon application of the Board under certain specified conditions. The Board must first present satisfactory evidence that a supply from the Board can be given to the owners of the station at a cost "below the then prevailing cost . . . of generating electricity at the station." Furthermore, the Board is required to supply to the owners of the station, for a period of not less than seven years, electrical energy up to the requirements of the owners consequent to the closing down of the station.[32]

An interesting plan for a sliding scale of rates is found in the agreements made between the London County Council and the London Electricity Supply Companies, confirmed by an act of Paliament.[33] The plan provides that the dividends payable by each of the companies shall be regulated in accordance with a prescribed sliding scale. Standard prices and standard dividends are set up. The payment of dividends in excess of the standard set up is made contingent upon a reduction in the standard price to the consumers. The amount saved to the consumers ("consumers' benefit") is ascertained and one sixth of such amount is allowed to the companies for additional dividends on ordinary capital.[34]

Determination of Valuations for Purchase and Rate Making

The most recent British method of determining valuations for purposes of rate making is laid down in the schedules attached to the Electricity (Supply) Act of 1926.

It is provided that the price which the Electricity Board shall pay for generating stations and main transmission lines shall be such sum as an auditor, appointed by the Electricity Commissioners, shall certify "to have been the amount of the expenses *properly incurred on, and incidental to, the provision of the*

[29] *Ibid.* Sec. 5, Sub-sec 2.
[30] *Ibid.* Sec. 6, Sub-sec 3.
[31] *Ibid.* Sec. 6, Sub-secs. 1–3.
[32] Weir Report, 1926, Sec. 46, p. 12.
[33] London Electricity (No. 1 and No. 2) Acts, 1925.
[34] Electricity Commission, *Eighth Annual Report* (1929) p. 26.

generating station or main transmission line, less depreciation on a scale fixed by special order."

The decision of the auditor, however, is subject to review by a barrister appointed by the Minister of Transport to be the arbitrator.[35]

Production Costs

The rules for determining the cost of production of electricity at selected stations are as follows:

The cost of production of electricity at any selected station shall be ascertained by calculating the following costs, charges and allowances in respect of the year of account:

(a) The sums expended for fuel, oil, water and stores consumed, for salaries and wages, and any contributions for pensions, superannuation and insurance of officers and servants, for repairs and maintenance, and for renewals not chargeable to capital account;

(b) Sums paid as rents, rates and taxes (other than taxes on profits) and for insurance, in respect of the station,

(c) The proper proportion of management and general establishment charges attributable to the station;

(d) Any other expenses on revenue account attributable to the station;

(e) Interest (exclusive of interest payable out of capital) on *money properly expended for capital purposes* (whether defrayed out of capital or revenue) and attributable to the station and the production of electricity therein.

The rate of interest for the purposes of this paragraph shall be:

(i) Where the owners of a selected station are a joint electricity authority or a local authority, the average rate payable on the money raised by the authority for the purpose;

(ii) Where the owners of the station are a company, the *average rate of dividends and interest paid by the company on their share and loan capital during the preceding year;* so, however, that the rate shall in no case be less than *five nor more than six and a half per cent. per annum.*

(f) An allowance for depreciation of the following amount:

(i) Where the owners of the selected station are a joint electricity authority or a local authority an amount equal to the sinking fund charges properly attributable to the station and the plant thereof;

[35] *Electricity (Supply) Act,* 16–17 Geo. 5, Ch. 51, 1st Schedule, Secs. 5 and 6.

Provided that where part of the expenditure was defrayed otherwise than by means of loans the allowance for depreciation shall be increased by such amount as the Electricity Comissioners think just:

(ii) Where the owners of the station are a company, an amount determined in accordance with a scale fixed by Special Order:[36]

The most significant section of the above seems to be the *underscored* portion which limits the interest to "money properly expended for capital purposes," which is quite similar to the Massachusetts prudent investment theory.

The significance of the above method of determining values may be more fully appreciated by a comparison of this method with that provided in the Act of 1888 which was in force down to 1926. The Act of 1888 provided that the local authority may, "after the expiration of a period of 42 years, or such shorter period as is specified in their behalf under the provisional order or the special act . . . and within six months after the expiration of every subsequent period of ten years, . . . require such undertakers to sell and thereupon such Undertakers shall sell them their undertaking . . . upon terms of paying the *then value* of all lands, buildings, works, materials, and plant of such Undertakers suitable to and used by them for the purpose of their undertaking within such jurisdiction. Such value to be in case of difference determined by arbitration . . . but without any addition in respect to compulsory purchase, or good will, or of any profits which may or might have been made from the undertaking before, or any similar consideration."

The "then value" in actual practice became the reproduction value at the time of purchase. Hence the great increase in the cost of material, etc., subsequent to the war, so enhanced the value of the undertaking that many municipalities have deemed it inexpedient to purchase the private undertaking, which they would have purchased under pre-war conditions.[37]

Achievements to Date

By March 19, 1929, the Central Electricity Board had adopted five schemes for five great industrial districts in Scotland, England and Wales as follows:

1. Central Scotland Electricity Scheme, adopted June 29, 1927.
2. South East England Electricity Scheme, adopted February 15, 1928.
3. Central England Electricity Scheme, adopted May 22, 1928.
4. North West England and North Wales Electricity Scheme, adopted October 12, 1928.

[36] *Ibid.* Sec. 7.
[37] Orren C. Hormell, *Electricity in Great Britain*, in Supplement to the National Municipal Review, June, 1928.

5. Mid-East England Electricity Scheme, adopted March 19, 1929. These five schemes include 42.8 per cent of the territory of Great Britain, 74.6 per cent of the population, an area accounting for 80.2 per cent of the electricity sold in 1925–26.[38] At the close of the year 1929 two other schemes were about ready for adoption by the Board.[39]

The Board is installing a standardized frequency as rapidly as conditions permit. It has adopted also a uniform voltage of 132,000 for the main grid.[40]

Towers and overhead wires are being used wherever possible, which is much more economical than underground cables.[41]

The board has established a central control station for the area of each scheme, with a control engineer in charge.[42]

Progress is being made in rural electrification but largely in connection with, and subsidiary to, the development of the schemes in the great industrial districts.[43]

Conclusions

The British policy of national development and control of electricity has for its essential features the following:

First. An attempt is being made to strike a workable medium between unregulated private industry and complete nationalization. The British are attempting to develop a major industry on the basis of cooperation between private capital and public agencies. The incentive for further municipalization of electric enterprises seems to have been weakened, while private capital is being subjected to a much severer regulation than formerly.

Second. The national scheme is limited almost solely to the generation and transmission of energy while distribution is left in the hands of the public and private agencies which existed in 1926.

Third. It appears that in the electricity field at least the British have adopted for the future a principle more nearly conforming to the "prudent investment" theory of valuation than to the "reproduction cost less depreciation" theory.

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[38] Central Electricity Board, *First Annual Report*, Mar. 1, 1927, to Dec. 31, 1928, p. 6.
[39] Information furnished the writer by the Secretary of the Central Electricity Board, Dec. 31, 1929.
[40] Central Electricity Board, *First Annual Report*, p. 15.
[41] *Ibid.* p. 16.
[42] *Ibid.* p. 23.
[43] Electricity Commissioners, *Ninth Annual Report* (1929), p. 13.

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FRANCE — PUBLIC UTILITIES

Introduction

National Policy

Public utilities in France may be divided in the main into three classes:[1]

1. Those entirely run with private capital under state supervision;

[1] From a typewritten memorandum submitted by H. Merle Cochran, American Consul, Paris, supplied by the French Ministry of Public Works.

2. Those run with private capital and municipal participation and control;

3. Those run entirely by the municipalities.

In the first category may be mentioned the railroads, with the exception of the State Railroad, which are controlled by the Superior Railroad Council which itself is under the supervision of the Division of Bureau of Railroads in the Ministry of Public Works. Railroads other than state owned and operated railroads operate under concessions granted for a limited period of time, at the expiration of which the State will take over the entire system, on payment of a suitable indemnity to the companies.

Passenger and freight rates must be approved by the Ministry of Public Works which exercises a strict control over all phases of exploitation of the lines.[2]

In the second category may be classed subways, tramways, motor busses, electricity, gas and in certain communes the water supply. In these cases the municipality has control over a large measure of the management of the enterprises. The municipality in many cases guarantees a minimum rate of interest to shareholders, which may on occasions necessitate the providing in the city budget for any losses that may be incurred owing to the tariffs being kept too low. To offset the possible loss to the municipal treasury the municipality shares in the profits.

In the third category are chiefly to be found utilities which are considered necessary for public welfare but are not of a profit-making character, such as garbage collection and disposal, sewage works, etc. In the City of Paris, however, the garbage collection is done under contract with a private concern, but with a proviso in the contract that the entire installation shall be turned over to the city at a later date, amortization being provided for in the annual fee paid to the company actually operating the plants and collection service. The City of Paris actually owns its own water supply which is operated by the city administration.[3]

Concessions granted to private enterprises to exploit public utilities are granted mainly by municipalities. Those which can be handled entirely as industrial or commercial enterprises must receive the approval of the Prefect of the Department. But they must also receive Ministerial approval if they are invested with public interest.

The Prefect is a governmental official charged with the administration of a Department, so that it is obvious that, in reality, all public utilities are subject to governmental approval before they can be exploited either by a private enterprise or by an enterprise in which the municipality participates financially or otherwise.

Once official approval has been secured for the terms and conditions under which such concessions are granted, the main burden of control rests more with the municipal than with the state authorities except in the case of the railroads which quite naturally owing

[2] *Ibid.* p. 2.
[3] *Ibid.* p. 2.

to their national scope, remain entirely under the supervision of the Ministry of Public Works.[4]

Summary of the Status of Electric Industries[5] in France (1928)

The producers and directors among the 1,200 concessionaires of distribution of electric power are grouped in a professional syndicate which includes 344 societies and represents an invested capital of more than seven thousand million francs (7,000,000,000), of which 4-½ mil. are in shares and 3 mil. in bonds. The members of the syndicate employ more than 30,000 workers. The electric power available and consumed in France is approximately 11,703,000,000 K.W. hours (1927). Of 40,743,000 inhabitants of France, 5 million are subscribers, and 30,200,000 live in communes on whose territory exists a distribution of power. In all the companies the profits of 1927 were greater than those of 1926.

The price per kilowatt hour for lighting in the principal cities of France is understood to be between 1 fr. 38 (at Saint-Etienne) and 2 fr. (at Cherbourg). In Paris it was from 1 fr. 78 to 1 fr. 68. The remuneration of capital of the principal societies of electricity has been 8 per cent and 9 per cent for the less prosperous to 20 per cent and 28 per cent for the more prosperous.

New electric share companies are founded each year. In 1927, 137 million francs were invested in formation of societies, 757 million francs in the increase of capital (shares) of the societies, and 475 million francs in the issuing of bonds, making a total of 1,370 million francs of capital, bearing an average rate of interest of 7.65 per cent.[6]

The rapid increase in the use of electricity is illustrated by the experience of the *Compagnie parisienne de distribution d'électricité* which reported an increase in the number of subscribers of 66,536 in 1926, and of 55,189 in 1927. The gain in the number of subscribers in those two years almost equalled the total number of subscribers in 1914. The cost to the company of new construction for generation and distribution is increasing by about 200,000,000 francs per year.[7]

The electrification of railways was continued. Actually 1186 kilometers of lines are (1927) electrified, placing France in the second position among European countries next to Switzerland and before Germany and Italy. The most advanced French railway system is the *"Compagnie de Midi"* which has electrified 768 kilometers of track, 550 kilometers of which is double track.

Great efforts were made in 1927 to carry on rural electrification. The state encouraged it by granting loans and subsidies to communes or groups of communes. As of January 1, 1927, among the 37,981 communes of the 90 departments 19,871 had been electrified,

[4] *Ibid.* p. 3.
[5] Jean-Marie Adam, *Les Industries Electriques* (1928) quoted *in Revue Municipale*, No. 828. November, 1928, pp. 1043–44.
[6] *Ibid.* p. 1043.
[7] Science et Industrie (1928) *Services de la Direction générale des Travaux de Paris*, p. 37.

that is about 52 per cent. This number was materially augmented during the year, and in many departments the proportion of the communes electrified (1929) surpassed 90 per cent. It is estimated that the whole country will be electrified by 1938 at a total estimated expense of around 5,000,000,000 francs.[8]

State Regulation of Electric Industries

In consideration of the importance of private development of electric power in France, the methods of state control deserve special consideration. The law and practice in France relative to the electric industry should be treated under two separate headings:

(a) State regulation of hydro-electric generating plants.
(b) State regulation of the distribution of electric energy in general.

State Regulation of Hydro-Electric Generating Plants

An effective method of control by the State is through the granting of concessions. By the law of October 16, 1919 no one can dispose of the power derived from the sea, lakes, or water-ways without a concession or an authorization of the State. The concession is in reality a contract between the State (or the commune) and the entrepreneurs of the power enterprise. The legal document is termed the *cahier des charges."* The concessionaire takes upon himself the expense of establishing the plant according to the conditions laid down in the contract for the right of exploiting the work for profit during a certain period of time indicated in the contract.[9]

How Concessions for Hydro-Electric Development are Granted

As a general rule the concession for the development of water power is granted by a decree of the Council of State after extended investigations and hearing. If after thorough investigation the Council of State is convinced that the proposal is compatible with the public interest the proposal is submitted to the consideration of the inhabitants in the interested communes. They are invited to record in writing their opinions and observations on special registers placed in each town-hall. Meanwhile consultation is had with the *Conseil Général"* of the department adjacent to the water power, the chamber of agriculture, the chamber of commerce, chambers of art and manufacturing, and other interested services and industries. If the State is convinced, after the above mentioned hearings and consultations, that the project is in the public interest a decree according the concession may be issued.[10]

The State, however, in consideration of the contractual character of the concession may refuse the concession without having to furnish any justification for its refusal.

[8] *Revue Municipale*, November, 1928, p. 1044.
[9] H. Berthélemy, *Traité élémentaire de droit administratif* (douzième edition), 1930, p. 711.
[10] M. M. Domergue et Lecat, *Législation française—matière de chutes d'eau et de distribution d'énergie électrique*, in *Transactions of the First World Power Conference*, Vol. IV, p. 1496.

The concessionaire cannot cede to others its rights under the concession without the consent of the State.[11]

Under the law the State may contribute capital, or allow subsidies especially when the principal object is the furnishing of energy for public services, for national defense, or for agricultural development. In all cases where the State contributes financially it can demand to have a certain number of representatives on the board of directors of the enterprise

How Permits for Hydro-Electric Development are Granted

Power development projects the maximum power of which is less than 500 k.w. (or less than 150 k.w. if the principal object is to supply public service) are granted by the State through permits rather than through concessions, (and to "permissionaires" rather than to "concessionaires"). The permit is not of a contractual character. The State (under the law of October 16, 1919) has the discretionary power of granting or refusing to grant the permit.

Such permits are given for a term of 75 years, and can be renewed for a period of thirty years. The State may take over, with adequate indemnity the dams and reservoirs. The permissionaire is not accorded the right of eminent domain and must acquire property and rights by private negotiation and contract. On the other hand he is not subject to any of the obligations imposed upon concessionaires, except that in case he is established on a water course belonging to the public domain he is required to pay a duty to the State.[12]

REGULATORY PROVISIONS

Eminent Domain

Usually the hydro-electric enterprise is declared to be a *public utility* which declaration carries with it the right of eminent domain (right to secure the dispossession of all grounds necessary to his enterprise). If it is not declared a public utility the grant nevertheless carries with it the right to occupy such private properties and submerge such shores as are necesary for the execution of the work.[13]

Time Limit of the Concession

The period of time during which a concession may run cannot exceed 75 years. The State, furthermore, reserves the right to take back the property before the end of the concessionary period on condition that a just indemnity is paid by the State. At the end of the concession the concessionaire must return to the State without charge all the real estate of the concession.[14]

Duties Paid to the State by a Concessionaire Developing Hydro-Electric Power Plants

1. An annual duty which is proportional to the energy produced and the profits realized is paid by the concessionaire. During the

[11] *Ibid.* p. 1496.
[12] *Ibid.* p. 1497.
[13] *Ibid.*
[14] *Ibd.* p. 1495.

first ten years this duty is proportional to the number of kilowatt-hours produced by the power plant and although the rate varies it is approximately around 4–100 centimes per kilowatt hour. Following the first ten-year period either this rate at regular intervals is revised in proportion to the profits accruing to the grantee, or the State receives a stipulated share of the profits.

2. A special annual duty is levied in the case where the power plant is established on a waterway of a public domain. This duty is in general placed at a low rate, 0 f. 25 to 0 f. 50 per k.w. of regulated average gross power.

3. An annual sum designed to pay the expenses caused to the State through the exercise of control over the concessionaire is also collected from the concessionaire. This sum is most often calculated at 0 f. 30 per k.w. of regulated average gross power. (*de puissance moyenne brute aménagée*)[15]

Other Obligations Imposed by the State on the Concessionaire

The concessionaire is required to furnish at approximately cost price power for the development of agricultural products; and a portion also must be left in the *department* adjacent to the power plant for the economic needs of that region. Otherwise it was feared there would be the danger of the exportation to distant places of all or a major portion of the power. The law fixes the maximum reserve for the two above named purposes at one-fourth of the power produced by the power plant.

The concessionaire is further limited in that he must conform the development to the objects defined by the "*cahier des charges.*" A maximum rate is also imposed upon him for sales to the public of energy which he does not consume.[16]

Conditions of Nationality Imposed on the Grantees; Prohibiting the Exportation of Energy

The law provides that only the French can be title-holders of hydro-electric concessions and permits. A company receiving such concession or permit must have its place of business in France and have Frenchmen among its directing personnel. This rule may be changed, however, by a decree of the Council of State.[17] The law also forbids in principle the exportation of hydro-electric power to foreign countries. This also may be modified by a degree of the Council of State.[18]

Financial Participation of State

The State exerts an extensive control through financial participation in some of the state conceded hydro-electric enterprises. Under the law of 1919 the State can participate in hydro-electric enterprises as follows:[19]

[15] *Ibid.*
[16] *Ibid.* p. 1496.
[17] *Loi relative à l'utilisation de l'énergie hydraulique (du 16 octobre, 1919),* Art. 26.
[18] *Ibid.* Art. 27.
[19] *Ibid.* Arts. 7–10.

1. The State can have assigned to itself shares of stock representing the advantages from the concession accruing to the concessionaire.

2. It can subscribe a part of the capital and receive in exchange first rank stock (*d'actions de premier rang*).

3. It can grant a subsidy to the concessionaire of an enterprise the principal object of which is to supply energy to public services, for national defense, or for promoting agricultural development (rural electrification). In such a case bonds or shares of the second rank (*2° rang*) are assigned to the State in proportion to the contribution.

In all cases where it contributes financially to an enterprise, the State is entitled to have a certain number of representatives upon the Board of Directors.[20]

State Control of the Distribution of Electric Energy

State regulation of the distribution of electric energy in France first arose out of the demand of the electric enterprises for the use of public ways (roads and streets).

Such rights are granted either under a permission—a license—(*permission de voirie*) or under a concession. The law of February 25, 1925, makes clear the legal distinction between the two methods.[21] The permission or license imposes upon the beneficiary (permissionaire) obligations or rules of a regulatory nature, and no contractural rights are acquired. Since the act of the government in granting the license is unilateral it may be revoked at any time in the same manner. The law provides, however, that if a definite duration of time is indicated in the license it can be revoked only on the ground that the proper condition of the highway, public security or conservation of the public domain justifies it.

The concession on the other hand is contractual in its nature. The contract regulates the relation of the concessionaire to the government and defines the reciprocal obligations imposed upon the parties to the contract. It cannot be revoked by a unilateral act of the government, or of the concessionaire, and only upon terms and conditions stipulated in the concession (contract). It may become inoperative in consequence of the failure of either party to fulfill its obligations.[22]

The method of granting concessions, however, proves to be an excellent means of regulation, in that the government as the conceding authority may choose the beneficiary, and also place detailed regulatory provisions in the contract.[23]

The policy of public control is based not only upon the right to determine and control the use of public ways but also upon the recognition that the distribution of electric energy is a public

[20] M. M. Domergue et Lecat, *Législation française*, in *Transactions of the First World Power Conference*, Vol. IV, p. 1490.
[21] J. L'Huillier, *Législation des distributions d'énergie électrique*, 7–18 passim.
[22] *Ibid.* p. 9.
[23] *Ibid.* p. 10.

service and invested with public interest. The government acting in conformity with the above legal principle includes in the concession provisions relative to rates at which electric energy may be sold and also rules regulating in general the exploitation of the enterprise.[24]

The law of June 15, 1906, modified by the laws of July 19, 1922, and February 27, 1925, and supplementary decrees of the council of State, lays down the legal principles governing the distribution of electric energy.[25] The purpose of this legislation was to bring the important distributing enterprises into a contractual relation with the government and to unify under the control of the State the regulation of the major portion of distribution of electric energy.[26]

The authority of the State to regulate the distribution of electric energy (as well as operation of tramways, gas, water and other public services) depends upon: (a) the declaration of *a public utility*, by the appropriate governmental agency (usually the *conseil d'état*), and (b) upon a grant for the use of the public way. The declaration of a public utility is the most important.

It should be emphatically noted that all enterpreneurs carrying on the service of distribution of electric energy are not necessarily concessionaires of a public service.[27] Before they become such, a decree or law so stating must be issued or enacted; moreover a concession of occupation of a public way does not of itself constitute or necessitate a concession of a public service.[28] In fact the distribution of electric energy even to the public may not necessarily be a public service. The law does not require it (although it is usually made such by the proper authorization). There may be distribution by a private enterprise, in which case the rules of private law apply with regard to such matters as expropriation, rates, etc.[29]

It is important to have a clear understanding of the use of the term concession in French law. When a declaration of public service or public utility has been made the concession is only a method of administering the public service. The state does not divest itself of the public service. It is indeed conceded but does not become any the less a *public* service. The concession represents merely a delegation and not an abandonment of authority. The document under which the concessionaire operates is in reality dual in its nature. The two portions, in effect, are distinct. That portion which has to do with the organization of the service has the nature of a law, that is the general laws relating to the organization of a public service are embodied in the document, while the act of concession is a contract, and creates a legal person

[24] *Ibid.* p. 10.
[25] The best analysis of these laws is found in J. L'Huillier, *Législation des distributions de'énergie électrique*, (Paris, 1928). See also M. M. Domergue et Lecat *Législation française. . . . matière de chutes d'eau et de distribution d'énergie électrique* in Transactions of the First World Power Conference, Vol. IV, pp. 1501–1511.
[26] J. L'Huillier, *Législation des distributions d'énergie électrique*, p. 24.
[27] G. Jèze, *Les Contrats Administratifs de L'état, des départements, des communes et des établissements publics* 1927), p. 114.
[28] *Ibid.* p. 116.
[29] *Ibid.* p. 118.

with specified, contractual rights and obligations. The modification at any time of the first portion, the general laws, does not effect a violation of a contract.

Under the contract may be included such items as the duration of the contract, agreement concerning repurchase by the public, subventions by the government to the concessionaire, guarantee of interest or the participation of the government in profits of the enterprise. Litigation with regard to the contract is within the jurisdiction of the administrative courts, while litigation over the legislative portion comes under the regular civil tribunal.[31]

Important among the items which remain outside of the contractual provisions, and subject to legislation and continuous regulation and modification are rates charged to the consumer and taxes.[32]

Principle of Monopoly

Under French law the exclusive (or monopolistic) character of a public service may not be taken for granted. The general rule is free competition (*libre concurrence*) while monopoly is the exception and exists only when it is expressly authorized and declared.[33] A public service which is an object of concession may be chartered as an exclusive monopoly by an act of Parliament alone (*monopole de droit*), or as a monopoly in fact (*monopole de fait*), usually under a grant of exclusive title by a municipality, or it may be chartered with no monopolistic privileges at all (*sans aucun* monopole).[34]

Legal monopoly by vote of Parliament has been given rarely—as in the case of the telephone system (1879–1884) and the manufacturing of matches (1872–1889).[35]

A good illustration of the second (*monopole de fait*) is found in the concessions to distributors of electricity for lighting purposes. It is interesting to note that the law of 1906 made a clear distinction between the distribution of electricity destined for motive power and that destined for lighting. In the first instance monopoly was not permitted, while in the second it was specifically authorized.[36]

Monopoly in fact created by the granting of exclusive titles was authorized to municipalities for all of their important public services or utilities by the law of April 5, 1884, Act 115.[37]

The granting of such a monopoly by "exclusive title" does not deprive the government (appropriate administration) of the power to organize another public service complemental to the conceded service, or the individual in the territory of the concession to generate his own electricity, or even sell a surplus to those in his vicinity, provided he does not use the public way.[38]

[30] *Ibid.* p. 65.
[31] *Ibid.* pp. 78–79.
[32] For a discussion of rates and taxes see below pp. 447; 451.
[33] G. Jèze, *Les contrats administratifs de l'état, des départements, des communes et des établissements publics*, p. 101.
[34] *Ibid.* p. 88.
[35] *Ibid.* p. 89.
[36] *Ibid.* p. 96.
[37] *Ibid.* p. 98.
[38] *Ibid.* p. 99.

Regulation of Rates

Under the French law the charge to the consumer or user of the services of a public utility is considered to be a special *impost*. An impost can be laid only under authority of parliament. Regulation of rates of a public service remains a public affair notwithstanding any features of the contractual side of a concession. Public service rates are not a table of prices fixed by contract. In practice rates may be proposed by the concessionaire, or established by the public authority upon the recommendations of the concessionaire, but never can the rates become effective without the approval of the public authority designated by law.[39]

In law, therefore, the fixing of rates is an act of regulation performed by a competent public authority. Hence, a rate may be modified at any moment without the consent of the concessionaire or the consumer, notwithstanding even the contract which the consumers may have with the concessionaire, unless otherwise provided by law.[40]

Parliament from time to time has enacted general laws establishing rules more or less flexible for the regulation of rates, which rules may be embodied in the *cahier des charges*.

A law of June 28, 1921 provided that the contracting parties may stipulate a maximum base rate for the sale of energy which is variable according to changing economic conditions. The change is accomplished by the application of a corrective term (*terme correctif*).[41]

The application of the corrective term depends upon the variation in electric economic index set up periodically by the Minister of Public Works, upon the advice of the Electricity Committee.[42]

In the principle, the base rates are fixed for the entire length of the concession and can be changed only in the cases laid down by the law for the *cahiers des charges* type.

The maximum base rates inserted in the Cahier des Charges are established in a way to correspond to an economic situation characterized by a certain value of the electric economic index determined previously by regions by the Minister of Public Works. In taking account of the price of coal and of the variations of the average hourly salary of the employees of the enterprise for the whole territory in relation to the average hourly salary for the year 1918 (1 f. 67 c.).

Two values are fixed periodically by the Minister of Public Works for the electric economic index—one for the low tension index, the other for high tension index. The coal element entering into the calculation of these two values is the same, but the salary element is higher in the index of low tension than in the high tension index, by reason of the more considerable part that labor has in the distribution of energy at low tension.

[39] *Ibid.* p. 68.
[40] *Ibid.* p. 70.
[41] J. L'Huillier, *Législation des distributions d'énergie électrique*, p. 104.
[42] *Ibid.* p. 105. Note for the composition and functions of the Electricity Comm. see below pp. 457–8.

The value of the low tension index to which corresponds the maximum base rate fixed by the Cahier des Charges for the sale of power at low tension is 130. This corresponds to the value of 100 for the index of high tension.

Under the terms of the Cahier des Charges the maximum base rates fixed for the sale of energy at low tension are applied so long as the low tension index does not deviate above or below more than ten per cent of the characteristic value of 130.

For the maximum base rates for high tension the maximum base rates are applied when the value of the high tension index does not deviate more than *pi* per cent. of the characteristic value of 100. The number *pi* is fixed by the Cahier des Charges between 5 and 10.

When the deviation of value of economic index in comparison with the characteristic value passes the rate as fixed by the Cahier des Charges the correcting term enters into play either to increase or diminish the maximum base rate.

In each case of this kind the conceding authority and the concessionaire discuss the formulas in order to adopt the one most equitable. They take into consideration the influence upon the cost price of power, the variation of the different expenses borne by the concessionaire, also the conditions of production of energy by steam or by hydraulic generation.

The corrective terms adopted in a rather general fashion are as follows: n (I–130) for power at low tension n′ (I′–100) for power at high tension in which n and n′ are the co-efficients of the rates of millimes (one-tenth of a centime) variable following the conditions of the enterprise. I and I′ are respectively the index of low and high tension. It is evident that it is impossible to conform to any rigid formula for the whole length of the concession. That is the reason why the Cahier des Charges provide for the revision of the corrective term in order to maintain a better harmony between rates and the economic situation. The revisions are made periodically in the course of time, at intervals fixed by the Cahier des Charges and which cannot exceed ten years. It should be made clear that the maximum base rates are not revisable in principle, and that the periodic revision bears only on the corrective terms. Such is true only when the general conditions of supply are not sensibly modified by factors over which the concessionaire has no control. On the other hand, the creation of new distributing systems or the development of hydraulic power which gives the distributor a supply at a lower rates is sufficient ground for the lowering of rates.[43]

The revision may be made by agreement, but in lieu of an agreement it is made by a commission of three members, one chosen by the concessionaire, one by the conceding authority and the third by the first two, or in case of a failure to agree, by the president of the Committee on Electricity.[44]

[43] M. M. Domergue et Lecat. *Législation française . . . matière des chutes d'eau et distribution d'énergie électrique,* in Transactions of the First World Power Conference, Vol. IV, pp. 1510–11.
[44] J. L'Huillier, *Législation des distributions d'énergie électrique,* p. 109.

Types and Characteristics of Contracts

The law recognizes and creates three types of classes of contracts(so-called *cahier des charges* types).[45]

The first type is that granted to private individuals or corporations by a commune or association (*syndicat*) of communes for a concession providing for public distribution of energy.[46]

The second type is that granted to private individuals or companies by the State, while the third type is that of a concession granted by the State to public service enterprises.[47]

The provisions included in each charter (*cahier des charges*) may be classified under three different headings.

1. Obligatory provisions (*dispositions obligatoires*) relating to public safety, etc.

2. Optional provisions (dispositions facultatives), relating to matters of local interest or special interest to the contracting parties. Such provisions must not be contrary to the national regulations set down in the decrees covering the type of *cahier des charges.*

3. Miscellaneous provisions (*blancs*) relating to such matters as rates, nature of current (high or low tension), etc.[48]

The provisions as classified above usually include the following:

1. The object of the concession.
2. Territorial boundaries.
3. Nature of the construction.
4. Time limit for construction, and inauguration of the enterprise.
5. Character of the current.
6. Maximum rates to be charged for electric energy.
7. Conditions relative to subscription for power by consumers.
8. Conditions determining the obligation to extend the distribution lines to outlying districts, or to new consumers.
9. Duration of the concession.
10. Conditions upon which the conceding authority may retake the conceded enterprise.
11. Means of eventual purchase of the distributing system by the conceding authority.
12. Conditions which result in forfeiture of concession.
13. Amount of security guaranteed to the public and to individuals.[49]

If the *cahier des charges* contains modifications of the provisions required by a decree for the *Conseil d'Etat* for the three types, the act of concession becomes effective only upon approval by the *Conseil d'Etat.*[50]

[45] Note. The *cahier des charges* is the document embodying the contract.
[46] Note. Details of this form were set up by decree of the Conseil d'état May 17. 1908, and modified by a similar decree of June 28, 1921.
[47] J. L'Huillier, *Législation des distributions d'énergie électrique,* p. 25.
[48] *Ibid.* p. 30.
[49] M. M. Domergue et Lecat, *Législation française . . . matière de chutes d'eau et de distribution d'énergie électrique,* in Transactions of the First World Power Conference, Vol. IV.
[50] *Ibid.* p. 1502.

How Concessions are Granted

The concession being of contractual form it is concluded and signed on the one hand by the mayor representing the commune, by the president of the communal syndicate representing the syndictate of communes, or by the prefect, or minister representing the state, and on the other hand by the concessionaire.[51]

It should be noted here, however, that the mayor of the commune acts only as "agent of execution" of the orders and votes of the municipal council, while the signature of the president of the syndicate of communes merely carries out the orders of a committee of the syndicate of communes, the action of which has been ratified by each municipal council represented in the syndicate.

The prefect, on the other hand, exercises real power, even to the extent that his approval is necessary before any concession granted by the commune may become operative.[52]

Taxes and Duties Imposed upon Concessionaires of Electric Distribution

The distributor of electric energy who makes use of a public way pays an excise tax for the privilege to the governmental unit having jurisdiction over the public way so occupied. The amount of the tax is calculated on the basis of a schedule laid down by decrees of October 17, 1907, September 7, 1912, and May 17, 1921.[53]

The rate per cent (*taux*) may be modified by a special agreement between the conceding communes and the concessionaire.[54]

The rate applicable to all cases where the national or departmental public way is used or (barring contrary agreement) where a communal public way is used, is as follows:[55]

First. A tax proportional to the length of lines established on or under a public way. (Art. 4.) (Branch lines serving real estate are not included in the calculation.)

Second. A tax proportional to the number of supports or poles placed upon public land. (Art. 4.)

Third. A tax proportional to the surface of the public domain occupied by posts of transformers and other similar fixtures. (Art. 7.)

It is interesting to note that the rate of the duties is fixed by a law and not by the contract of concession, hence modification of the excise rates are applicable to concessions made prior to the revision.[56]

The communes may by agreement with the concessionaire lower the rates on consideration of special advantages. The value of the specified advantages is determined by the prefect. The commune cannot by agreement entirely eliminate the tax.[57]

[51] J. L'Huillier, *Législation des distributions d'énergie électrique*, p. 23.
[52] *Ibid.* p. 21.
[53] *Ibid.* p. 37.
[54] *Ibid.* p. 38.
[55] Conseil d'état, *Decret du* 17 *mai* 1921.
[56] J. L. Huillier, *Législation des distributions d'énergie électrique*, p. 39.
[57] *Ibid.* p. 40.

Alternative Plans of Taxation

Communes have the option of adopting as a basis of calculating the total tax, (1) either the amount of gross receipts, (2) or the total quantity of energy sold by the concessionaire in the territorial limits of the commune.

If the first alternative is adopted the rates cannot exceed the maximum fixed by the decree of May 17, 1921. The maximum percentage rates applicable to gross receipts vary in proportion to the population of the commune and differ according as the energy is sold at a high tension (above 1000 volts) or at low tension, and also according as it is employed for lighting or other uses. The application of the above principle is illustrated by the following table set up in the decree of May 17, 1921:

TABLE FOR ASSESSMENT OF TAXES ON BASIS OF GROSS RECEIPTS[58]

Communes	Distribution of Energy: Sold at low tension, For lighting	Sold at low tension, For all other purposes	Sold at high tension (above 1000 volts)
Paris	15	15	15
Communes of more than 100,000 inhabitants and departments of the Seine	8	4	2
Communes of 20,001 to 100,000 inhabitants	7	3	1.50
Communes of 5,001 to 20,000 inhabitants	6	2	1
Communes of 5,000 inhabitants and less	5	1.50	0.50

It should be noted that account is not taken of receipts realized by the concessionaire from things other than the sale of current.

The second alternative which may be adopted by the communes is that based upon the amount of energy sold. The computing of the tax on this basis is limited to energy sold at low tension. The tax cannot exceed the maximum fixed by the decree of May 17, 1921; the percentage rates vary in proportion to the population, and according as the energy is sold for lighting or other purposes. The details of the above are illustrated in the following table:

TABLE FOR ASSESSMENT OF TAXES ON THE BASIS OF ENERGY SOLD[59]

Communes	Distribution of Energy: Sold at Low Tension, For lighting Per K.W.H.	For all other purposes Per K.W.H.
Communes of 100,000 inhabitants and Communes of Dept. of the Seine excluding Paris	0.15	0.05
Communes of 20,001 to 100,000 population	0.12	0.04
Communes of 5,001 to 20,000 population	0.09	0.03
Communes of 5,000 population and below	0.06	0.02

These maximum rates are reduced by half for that portion of the energy which comes from hydraulic plants.

[58] *Ibid.* p. 41. Note: Figures in table represent per cent of receipts.
[59] *Ibid.* p. 41.
[59] *Ibid.* p. 42.

A keeping of accounts in proper form subject to public audit, and annual reports are required of concessionaires taxed on the basis of gross receipts.

In case the distributor of electricity uses the right of way of a railroad instead of a public highway the lighting company or enterprise must pay to the railway an annual indemnity amounting to the sum which would be paid to the public authority in case a public way had been used.[60]

Expropriation

When an enterprise for the distribution of electric energy has been declared a public utility and granted a concession the declaration gives to the concessionaire the right of expropriation and of encroaching upon the private property for certain ends, to wit:

1. The establishing of supports for conductors, either on the walls of buildings facing on the public way or on the roofs and grounds of castles.
2. Placing the conductors over private property.
3. Digging tunnels or setting up supports on private grounds not improved.
4. Removing branches of trees which threatened damage to the lines.[61]

Going back to the law of 1833 and 1841, modified subsequently several times, the legislative or executive authorities rather than the judiciary are empowered to declare an enterprise a public utility.

Three rules of that early law are still in effect.

1. Public utility is declared by a law or decree.
2. Expropriation is pronounced by a tribunal which merely acts as a "guardian of the form."
3. The indemnity is fixed by a jury.[62]

The law of June 15, 1906, applies the principles of the law of 1841 in detail to the expropriating of private property necessary for the works of distributing electric energy. The expropriation is announced in the name of the conceding authority and not in that of the concessionaire.

The procedure is somewhat complicated, but the following are the essential steps:

1. The administrative authorities carry out an inquiry, under a prefectoral decree, in each interested commune. The commission of inquiry is composed of a presiding officer, the sub-prefect of the arrondissement, four councilors named by the prefect, and the chief engineer of control of the service. After hearing all interested parties they announce their opinion. Their opinion is then transmitted by the prefect to a public prosecutor who submits it to the civil tribunal. This tribunal examines the opinion of the administrative board to ascertain whether all phases of the law

[60] *Ibid.*, p. 44.
[61] M. M. Domergue et Lecat, *Législation française . . . matière de chutes d'eau et de distribution d'énergie électrique, in Transactions of the World Power Conference*, Vol. IV, p. 1503.
[62] H. Berthélemy, *Traité élémentaire de droit administratif.* (1930) p. 661.

have been complied with. If all the procedure has been legal, then expropriation of the private property is declared.

The last step is the determination of the indemnity. The concessionaire makes an offer of indemnity, but if the offer is refused the indemnity is set by *a jury of expropriation,* taking into account the total injury to the dispossessed and the benefit accruing to the concessionaire.[63]

NATIONAL SCHEMES FOR GENERATION AND TRANSMISSION

Legislative Provisions Affecting National Development

Water power: National development of water power is furthered through the activities of a committee on hydraulic power.[64] The Law of Oct. 16, 1919, Art. 31 provides for the composition and duties of a consulting committee. Its chief duty is to give advice on all questions relating to hydraulic power submitted to it by the appropriate governmental agencies. It is consulted before decrees are issued for the execution of the laws relating to hydraulic power, and before plans are completed relating to granting of concessions. Although merely advisory in its authority its opinions are generally followed by the administration.[65]

The administration, under the law of Oct. 16, 1919, has the authority to require concessionaires and permissionaires located along the same river or in the same valley to group themselves together under governmental administrative direction, (accompanied with governmental financial aid) for the purpose of constructing such works of collective interest as connecting lines between plants, high tension transmission lines to distributing stations and of collective management of water sources and reservoirs.[66]

Distribution: In the field of distribution of energy (steam generated as well as hydraulic energy) state control and development is furthered by the control vested in the minister of public works and his subordinate agents. An engineer in chief, appointed by the minister to have charge of the regulation or direction of the service in each department, has the authority to call upon municipal agents for information and assistance, thus constituting an important unifying influence.[67]

A most effective coordinating agency is that of the Electricity Committee (*Comité d'électricité*) functioning under the law of June 15, 1906, and a decree of Feb. 7, 1907. It is responsible to the minister of public works.[68] It is required to give advice on all questions submitted to it by the interested ministers and governmental agents.[69]

Every concessionaire of a distributing system is required at the request of the minister of public works, to receive on his lines,

[63] J. L'Huillier, *Législation des distributions d'énergie électrique,* pp. 62–63.
[64] See below p. 458 for the composition of the committee.
[65] M. M. Domergue et Lecat, *Législation française . . . in Transactions of the First World Power Conference,* Vol. IV, p. 1500.
[66] *Ibid.*, p. 1499.
[67] J. L'Huillier, *Législation des distributions d'énergie électrique,* p. 202.
[68] For composition of the committee see below p. 458.
[69] J. L'Huillier, *Législation des distributions d'énergie électrique,* p. 27.

to the limit of the capacity of his lines, energy designed for public service.[70]

National Aid to Rural Electrification

The State, under the law of Aug. 2, 1923, through the National Bank for Agricultural Credit (*Caisse Nationale de Crédit Agricole*) makes loans at a reduced rate of interest for the establishment of rural systems distributing electric energy. These loans are made to the concessionaires (public or private) including cooperative agricultural societies.[71]

Non-Governmental Agencies, Furthering a National Scheme

The outstanding non-governmental agency for furthering national development of electricity is the Union of Electrical Syndicates (*Union des syndicats de électricité*).[72]

It was chartered in Paris in 1907, and has for its object a permanent liasion between manufacturers of electrical materials and equipment, private and public enterprises for electric generation and distribution, operation of gas works, tramways, etc. and various technical and scientific organizations in France. It furnishes a clearing house for the study, investigation and reports on questions of common interest to all the interests, and also furnishes a ready means of unofficial conciliation and arbitration in case of controversies among its constituent elements.[73]

Its activities are far reaching and continuous, through meetings of its general assembly, work of its secretariat, investigations and reports of its several committees and the publication of the periodical *Revue Générale de l'Électricité*.[74]

Cooperation and Combination of Private Companies

Among the European countries studied France stands high as regards the proportion of electric generation in the hands of private companies. The principal companies listed below furnish France with the major portion of its electric energy.[75] These com-

[70] M. M. Domergue et Lecat, *Législation française . . . in Transactions of the First World Power Conference*, Vol. IV, p. 1508.
[71] J. L'Huillier, p. 84.
[72] See Union des Syndicats de L'Electricité, *Annuaire*, 1929, *passim*.
[73] *Ibid.*, 1926, pp. 8–9.
[74] *Ibid.*, pp. 11–15.
[75] British Electrical and Allied Manufacturers' Association (Beama Special Publication No. 2), *The Electrical Industry in France*, p. 29.

COMPANIES

a. Water Power Companies.
- Energie électrique du littoral méditérranéen.
- Energie électrique du sud-ouest.
- Compagnie électrique de la Loire et du centre.
- Société générale de force et de lumière.
- Forces motrices du Rhone.
- Energie électrique du Tarn.
- Forces motrices du Haut-Rhin.
- Union des producteurs d'électricité des Pyrénées occidentales (5 cos.).

b. Steam Plant Companies.
- Union d'électricité.
- Companie parisienne de distribution d'électricité.
- La Sidérurgie lorraine.
- Energie électrique du nord de la France.
- Compagnie parisienne de distribution d'électricité.
- Compagnie centrale d'énergie.
- Compagnie électrique de la Loire et du centre.
- Société électrique du nord-ouest.
- La Houve.
- Compagnie marine et d'Homecourt.

panies as well as many transmission and distributing companies are bound together by joint financial companies. Three great electrical engineering companies, namely, *Thomson-Houston, Schneider et Cie*, and *Aletiers électriques du Jeumont* through finance companies or direct stock ownership control largely the construction of power stations and erection of transmission lines. The absorption of smaller companies by the larger companies has been and still is an important factor in the power development. The *Union d'électricité* the largest steam generating company in France controls most of the supply companies in the region of Paris.[76]

Private ownership and operation of electric utilities is the rule rather than the exception in France. Municipal control is so far reaching through the granting of concessions that there is very little incentive for municipalities to take upon themselves the added burden of ownership and direct operation of electric utilities.

The provisions in the *cahier des charges* (charter) give the municipalities advantages which may be upheld in the administrative court if they are of a contractual nature, or in the civil tribunals if they are of the nature of public law. In no case may the courts set aside the provisions of a concession on the American principle of confiscation of property under the "due process of law" principle. However, both the national laws, and the practice of the municipalities with regard to concessions generally guarantee protection of property to the investors through the specific provisions written into the *cahier des charges*.[77]

The details of administration of municipally owned electric enterprises, and the regulation of the privately owned (including mixed type where shares are owned both by private companies and by the commune) fall to the administrative branch (mayor and adjoints) of the commune, acting in many instances under direction of the municipal council.

Within the limits of the national laws[78] and decrees outlined earlier in this article the communal administration determines the details to be incorporated into concessions (in the *cahier des charges*) granted to the electrical enterprises operating within the commune.[79]

The essential elements and prevailing policies of municipal control are found in the system adopted for Paris.

The distribution of electricity both for lighting and for power in Paris is provided by a chartered society or company (concessionaire) the *compagnie parisienne de distribution d'électricité*).[80] The policy of permitting the use of public streets for distribution of electric energy by private individuals was adopted in 1889. Paris at that time was divided into six sectors, each sector extend-

[76] British Electrical and Allied Manufacturers' Association (Beama Special Publication No. 2), pp. 31–38.
[77] G. Jèze, *Les contrats administratifs de l'état, des departements, des communes et des établissements publics*, Chap. III.
[78] See especially the law of June 15, 1906, and Feb. 27, 1925.
[79] J. L'Huillier, *Législation des distributions d'énergie électrique*, p. 20.
[80] *Concession de la distribution de l'énergie électrique dans Paris*, p. 3.

ing from the center to the outlying districts. In each sector there was granted to a company the permission to distribute energy for a period of 18 years. In addition to the private companies there were two municipal plants, one in Halles, and one in Buttes-Chaumont. The permission granted gave no monopoly privilege, neither did it impose regulatory provisions regarding distribution.[81]

At the end of the 18 years a system leading to unification and regulation was adopted under the convention (ordinance) of September 5, 1907, and the decree of September 8, 1907.[82] The ordinance put into effect in Paris the principles of the parliamentary act of June 15, 1906.

A transitory period of seven years (Nov. 1, 1907, to Dec. 31, 1913) was provided for during which the distribution of energy would be centralized and the unification of the enterprise would be furthered by the creation of a Committee of the Union of Sectors (*comité de l'union des secteurs électriques parisiens*). The committee consisted of representatives from each of the concessionaire electrical companies and societies in Paris.[83] The consession laid down specific rules regulating rates to communes, lease or rent of municipal property to the concessionaires, wages and conditions of service of employes, and imposts.[84] At the end of the transitory period the several electric companies and societies in Paris were incorporated into a joint stock company, under the name of Parisian Company for the Distribution of Electricity (*compagnie parisienne de distribution d'électricité*).[85] It was organized with a capital of 100 million francs. (Its official address was 23 rue de Vienne, Paris).[86] The concession is granted for the period extending from Jan. 1st, 1914, to June 30th, 1950.[87]

The company was given the monopoly of distribution within the territorial limits of its concession.[88]

The company was denied the right, without special authorization of the municipal council and approval of the Prefect of the Seine, to carry on any other business or industry. It agreed to carry out the program of development including the erection of new power stations ordered by the Prefect of the Seine. It agreed further to pay its employees engaged in construction the wages conforming to the standards set in municipal employment.[89] The company pays to the city, for the use of the streets, 20 francs per kilometer of tunnels under the streets. It also pays a per cent of the gross receipts as an excise tax. A complicated system of distributing the excess profit through the establishing of certain funds, such as the working fund which varies from 20 per cent

[81] M. Boutteville, *Production et distribution d'énergie électrique, dans Science et Industrie*. 12e Annee, 2e Edition, 1928, p. 33.
[82] Subsequently modified by amendments in 1921, 1924 and 1925. See *Concession de la distribution de l'énergie électrique dans Paris. Avenant No. 3, à la convention du Septembre*, 1907.
[83] *Concession de la distribution de l'énergie électrique dans Paris*, Art. 4.
[84] *Ibid.*, Arts. 1–19.
[85] *Ibid.*, Art. 21.
[86] M. Boutteville . . . *Science et Industrie* . . . . 1928, p. 33.
[87] Note: As the first concession was to expire in 1940, but by an amendment to the concession in 1924 the date was changed to 1950 (Art. 20, footnote 1).
[88] *Concession de la distribution de l'énergie électrique dans Paris.* Art. 23
[89] *Ibid.*, Arts. 25–26.

to 12 per cent on receipts from current, according to the rise and fall of the coal index and the salary index, and the levy on the annual excess profits. From 1930 to 1950 the share of the company shall be n-20ths of that of the city (n) being the number of years remaining up to January 1, 1950. At the expiration of the concession or in case of annulment, the working fund shall belong to the city to the amount of 20,000,000 francs; of the remaining the city shall receive three-fourths and the company one-fourth.[90]

Rate Regulation

An excellent example of the method of rate regulation through the system of granting concession is found in the concession for the distribution of electric energy in Paris, Art. 32.

In that concession a maximum rate was set up in the *cahier des charges*, first for purposes of lighting and second for all other purposes. Such maximum rates were to be lowered by 25 per cent for primary current. No preferential rates were to be permitted. If reductions on the maximum prices are made for one subscriber the company must extend the benefit to all subscribers of the same class.

Every new expense to the company resulting from the action of the municipal council shall permit an increase in rates upon approval of the municipal council.

An amendment to the charter dated Aug. 7, 1921, creates a sliding scale for the price of energy conforming to the fluctuations in the price of coal and in the cost of labor. The coal index is determined periodically (at least once each year) by the Prefect of the Seine after hearings granted to the interested parties, while the salary index is determined in the same manner once each year.

This procedure has for its object the maintenance of rates in harmony with the actual changes in the real expenses of the concessionaire.[91]

Agencies for the Regulation of Electric Enterprises

The French Parliament is free to make general laws for the control of electric enterprises unembarrassed by constitutional limitation or court decisions. The council of state (*conseil d'état*) is entrusted with supplementing parliamentary acts and putting into effect regulation within the limits of powers delegated to it relative to the industry.

In general, however, the actual control of the enterprise falls within the jurisdiction of the Minister of Public Works and subordinate agents of the state, department or communes responsible directly or indirectly to him. Among these the Prefect of the department holds an important position.[92]

Within the department of the Minister of Public Works there was created by an order of Feb. 28, 1920, "a central service of

[90] *Ibid.*, Art. 28, Pt. 2.
[91] *Concession de la distribution de l'énergie électrique dans Paris, Art. 32, et 32 bis (1).*
[92] J. L'Huillier, *Législation des distributions d'énergie électrique*, p. 202.

hydraulic power and of the distribution of electric energy.'' The board consists of a chief engineer and three adjoints, who are also engineers. Their duties are to study the questions relative to extension of electric service to unsupplied regions, make maps of the existing systems, and study and report to the minister upon all questions relating to generation and distribution submitted to them by the minister.[93]

The Electricity Committee (*comité d'électricité*) was created by the law of June 15, 1906, and organized by the decree of Feb. 7, 1906, and Feb. 8, 1922. It is composed of 15 government officials and 15 representatives of the interested industries, appointed by the Minister of Public Works. Among the government's representatives are inspectors of public works, engineers in charge of departmental services, etc., while directors of the leading electrical societies and companies make up the major portion of those representing industry. The functions of the committee are purely advisory but the law requires the advice of the committee upon most questions necessitating the issuing of decrees or granting of permits and concessions by the state or syndicates of communes.[94]

A committee on the distribution of electric energy operates under decrees of 1921 and 1925. It is composed of twelve representatives of the public administration, twelve representatives of the industry of distributing electricity, and twelve representatives of the consumers of electricity. Their duties are likewise advisory rather than regulative.[95]

Besides these advisory boards, there is a staff of engineers and a staff of inspectors in each department which are available for technical information and advice in relation to the generation, transmission and distribution of electric energy.

Within the municipalities the chief agents of control over electrical enterprises are the mayor and adjoints, but it should be noted that they act in important matters only as executive agents of the municipal council.

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[93] Union des syndicats de l'électricité, *Annuaire*, 1926, p. 242.
[94] *Ibid.*, p. 246.
[95] *Ibid.*, p. 248.

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GERMANY — PUBLIC UTILITIES

Introductory

The movement in the latter part of the nineteenth century towards municipal ownership and operation of public utilities, known in Germany as ''municipal socialism,'' had its theoretical basis not in Marxian socialism, but in the nineteenth century liberal doctrines of municipal home rule. The impetus to the movement, however, seems to have come not from theories of any kind so much as from the actual needs of the German municipalities in an era of increasing industrialization and population density.[1] Six stages may be discerned in this development. The municipalities first took over water works, and then in order, slaughter houses, gas works, electrical power stations, street railways, and finally, during and after the World war, the distribution of milk, and other staples.[2] The result of the movement is that at the present time the great majority of public utilities are owned and operated by the municipalities. The contrast with the American situation is readily obvious.

Public Policy as Portrayed in Legislation

Generally speaking, German municipalities are practically independent of state or federal control in the administration of their public utilities. This independence, of course, is simply one aspect of the home rule which the municipalities enjoy.

There are, however, certain state and federal laws which deserve mention. First, there are state tax laws, (i. e., laws of the *Länder*) which lay down the principle that municipal utilities must pay their own way, including interest and sinking fund charges. An example of such laws is the Prussian municipal tax law (*Kommunalabgabengesetz*) of 1893. The present trend as reflected in the writings of German experts and in proposed legislation is towards granting to the municipality owned utilities more freedom from the control of the municipal assemblies (*Stadtverordneten*) and towards providing them with greater flexibility of organization and administration.[3]

[1] H. Bohmann, *Die Bedeutung der Gemeindebetriebe für die Gemeindefinanzen*, p. 6.
[2] P. Mitzlaff und E. Stein, *Die Zukunftsaufgaben der Deutschen Städte*, p. 899.
[3] *Ibid.*, pp. 916-18; also H. Bohmann, *Die Bedeutung der Gemeindebetriebe für Gemeindefinanzen.*

Constitution and Laws of the Reich Relating to Public Utilities

The German constitution, in one article at least, bears directly upon public utilities. Article 156 of the German constitution in part reads as follows:

> The Reich can take over by law as public property without prejudice to compensation and with due consideration of the provisions which govern expropriation, private economic enterprises suitable for socialization. Either the Reich itself, the states, or the communes, may engage in the administration of economic enterprises and associations, and it may secure in other ways a controlling influence upon them.[4]

In pursuance of the above constitutional principle, Parliament enacted a law in 1919 providing for the socialization of the electrical industry (*Gesetz betreffend die Sozialisierung der Elektrizitätswirtschaft*). This law which looks towards the creation of a unified national system of production and distribution of power, has not yet been taking advantage of by the Reich.[5] Blachly and Oatman, have this to say about the law:[6]

> . . . the law itself has not been carried into effect This is probably due to the fact that there are already a great many small communal and state plants and relatively few private undertakings, and also to a feeling that except for production of high voltage currents the electrical industry is largely local in nature, centering around certain large coal fields and water power stations. Since the war, however, there has been an enormous increase in electrical production; and although the law has not gone into effect, there has been a rapid development in public operation of the electrical business. As a result, approximately 82 per cent of the electrical business is now either wholly or partly under public control.

National Taxation

By the Reich law of 1925 the income and property of municipally owned public utilities were exempted from taxation by the Reich.[7]

By the Reich municipal tax laws of 1920 and 1923, which in effect make the municipalities "paying guests" of the Reich, the municipalities are deprived of the power of levying income taxes or of any other taxes which might be detrimental to the Reich fiscal

[4] The German is as follows: Das Reich kann durch Gesetz, unbeschadet der Entschädigung in sinnegemässer Anwendung der für Enteignung geltenden Bestimmungen, für die Gesellschaftung geeignete private wirtschaftliche Unternehmungen in Gemeineigentum überführen. Es kann sich selbst, die Länder oder die Gemeinden an der Verwaltung wirtschaftlicher Unternehmungen und Verbande beteiligen oder sich daran in ander Weise einnen bestimmminden Einfluss sichern.

[5] The law of 1919, *Gesetz betreffend die Sozialisierung*, etc., was passed December 31, 1919, and the text of the law may be found in the *Reichsgesetzblatt* for 1920, p. 19.

[6] F. F. Blachly and M. E. Oatman, *The Government and Administration of Germany*, p. 581.

[7] F. Adickes, *Das Kommunalabgabengesetz*.

system. The result is that the municipalities are now forced to raise gas and electricity rates, in order to realize a surplus from their utilities to meet their fiscal needs. The principle, in fact, is now generally established that municipally owned utilities should be operated at a profit.[8]

A Comparison

In the matter of the administration and control of public utilities the German practice is widely at variance with our own. The outstanding difference is this: There are in Germany no controlling agencies such as our Interstate Commerce Commission or our state public utilities commissions. Public control is exercised very largely through the complete or partial ownership of the public utilities by the municipalities, the *Länder*, and the Reich.

Present Situation in the Field of Electrical Enterprises

For several decades public management in the field of electricity has been on the increase in all parts of Germany. Municipal management and control plays the more important part. The Reich maintains few public utilities, and is in general merely financially interested in some great electric companies. At present there are 614 electric works. Of these 16 are in the possession of the German Reich, 5 leased, 181 private, 319 communal (municipal) and 93 mixed management, i. e., shared by public and private management. In the management of electricity a certain control is given the Reich by the law mentioned above.[9]

National Schemes for Power Development

The national schemes for power development are based upon three principles:

1. Centralization of the production of electrical energy in large power stations to ensure the maximum efficiency.
2. Utilization as far as possible of power resources auxiliary to hard coal, i. e. brown coal (lignite) and water power.
3. Interconnection of power stations through main transmission lines.[10]

It has been pointed out by the English authority, H. Quigley, that: In Germany a clear distinction has been drawn between generation and transmission on the one hand and distribution on the other, and there is undoubtedly a strong tendency for the State to take over transmission and generation, leaving distribution to authorized undertakers. In other words, the work of reorganization of power supply has covered and is covering three stages:

1. The whole country becomes split up into a limited number of superpower zones according to the scheme elaborated in 1919. Each

[8] H. Bohmann, *Die Bedeutung der Gemeindebetriebe für die Gemeindefinanzen*, p. 18.

[9] Data furnished by Prof. Walter Norden, Professor Municipal Government, University of Berlin.

[10] British Electrical and Allied Manufacturers' Ass'n. (Beama Special Publication No. 3. *The Electrical Industry in Germany*, pp. 130–131.)

zone is covered by a number of trunk lines interconnecting distribution centres, and acting as main transmission lines at extra high voltage.

2. To avoid the difficulties and the dangers of bureaucratic administration, the work of interconnection is entrusted to power supply companies worked on the lines of private enterprise, the capital of which is owned by the State.

3. The last stage in the process lies in interconnection of the power zones with each other; the whole country becomes a network of transmission lines, working on a uniform voltage and uniform frequency.[11]

The situation in 1925, according to Quigley, was as follows: Three super-power zones had been delimited, the Central German, the Saxon and the Bavarian, while a fourth one, covering Rhineland-Westphalia, would have been also surveyed if the occupation of the Ruhr had not delayed progress. In the Central Zone, one state-controlled company—the Elektrowerke Company—has now been in operation for several years. It supplies Berlin with electricity. In Saxony, a similar company was formed in 1923, the Saxon Company. It has now linked up Dresden with Leipzig through one main trunk line operating at 100,000 volts. This system is connected in the north to the Lauta power station of the Elektrowerke Company, and in the south to the network controlled by the Walchensee Power Company, which acts in Bavaria in the same capacity as the Electrowerke Company.

It is important to note that state control in the form of those companies begins and ends with generation and transmission; power is generated and supplied in bulk in certain distributing heads scattered over the transmission network, and from these heads authorized distributors carry out the work of distribution. The price of power as applied in bulk is only sufficient to cover the cost of generation and transmission without profit, and the price at which the authorized undertakers are allowed to sell power is controlled by the State with a view to ensuring a fair return on capital invested without unnecessary profiteering.[12]

Much progress has been made since 1925. The following is the plan of the superpower development reported for the year 1930-1932. Early in 1930, a 220,000 volt line will be completed between Innsbruck in the Austrian Alps and Cologne via Friedrichshafen on Lake Constance. It will be extended later to Hamburg, a total distance of over five hundred miles. Within another two years the voltage on this line will be raised to 380,000. The German-Austrian area will be traversed by four 200,000 volt—all base load lines. To make this high tension transmission grid possible it has been necessary to bring into harmonious cooperation by stock ownership and otherwise practically every electrical generating and distribution agency in Germany. In every instance these developments have

[11] Hugh Quigley, *Electrical Power and National Progress* (1925), p. 101.
[12] *Ibid.*, p. 102.

had to secure the approval of the national authority charged therewith.[13]

The policy of developing a nationally coordinated scheme of electrical power generation and distribution received much attention during the war as a means of economic expansion which they hoped to put into effect at the close of hostilities.

After the treaty at Versailles such a power plan became the basis of the hope for restoration of full economic strength resulting from the losses imposed by the treaty. At first (1919) national ownership appeared to be the policy likely to be adopted. By stating the national claims to the control of power stations and public supply systems, the Electricity Act of 1919 laid the foundations for a possible nationalization of the whole industry. It was purely optional in its effect and required for its completion further legislation which the German parliament has never enacted.

The development of the power industry outlined above is being brought about by the fullest cooperation of the nation and states and the great private industries and private capital. Giant power stations have been constructed in the industrial areas with main transmission lines connecting them, and forming a great gridiron which makes possible the pooling of energy from not only the great steam power station, but from the waste heat in the great steel works, brown coal in central Germany, and water power from the Bavarian Alps. The great companies and the national, state and municipal plants are all linked together so that a marked revolution has already taken place in German industry. "The textile mill, operating in an obscure valley of the Black Forest, may obtain its power from a high pressure system as cheaply as a great factory located in the Ruhr; it can tap power plants feeding into the network as far away as Cologne or central Germany and is sure of an absolutely constant supply."[14]

Municipal Operation and Management

Since municipal operation and management play the most important role in the field of public utilities it is important to examine in detail the several systems operating in German cities.

The comments and conclusions of H. Weber on a national system of electrical power development are worthy of notice:

Weber distinguishes five stages in the development of the electrical power industry:

1. *Einzelanlagen*, 1878–84. Stations owned and operated by an individual or corporation for own use as, for example, in a restaurant or theatre.

2. *Blockanlagen*, 1884–90. Stations supplying a small community of consumers.

3. *Stadtzentralen*, 1890–1900. Stations supplying a whole city.

4. *Uberlandzentralen*, 1900–12. Stations supplying city and outlying communities as well.

[13] Information furnished to the writer by Morris L. Cooke, of Philadelphia.
[14] H. Quigley and R. T. Clark, *Republican Germany*, pp. 150–152.

5. *Grosskraftzentralen,* 1913—. Stations hooked up in giant systems.

In the period of the first two stages distinguished above, private capital was predominant in the electrical industry. In the third stage, the municipalities themselves, through ownership and operation, play a leading part. In the fourth stage, private capital is important, but municipal control is assured through the *gemischtwirtschaftliche Unternehmungen.* In the fifth stage the *Länder* have become entrepreneurs. At the present time municipalities control about 50 per cent of the power produced and the *Länder* 25 per cent. The remaining 25 per cent is produced by private companies. The old argument respecting the relative merits of private and municipal ownership has given way to the argument respecting the relative merits of municipal and state ownership and control. Weber believes that in the years to come the great conflict will be between the *Länder* and the Reich, a conflict which will be heightened by the political issue of federalism. The agitation for state monopoly of electrical power began, he points out, in the era of *Uberlandzentralen* (1900–12), as a result of the dissatisfaction of the rural districts with the meager power facilities afforded them and of the general fear of private monopoly. At the present time discussion centers around the monopoly of power by the Reich. Opinions, according to Weber, may be classified under three heads:

1. Full freedom of development; *laissez faire* on the part of the Reich.
2. Reich monopoly of production and distribution of power, extending down to the small consumer.
3. Reich monopoly of production and distribution with respect only to the big consumers; i. e., *Länder,* municipalities, and large private concerns.

Weber believes that the first two opinions are extreme. Adherence to the first policy would result in continuing inefficiency and waste, and in correspondingly high prices for the consumer. Complete Reich monopoly would deprive the municipalities of one of their chief sources of revenue. The third policy, he holds, is the best, on the condition that the Reich put the economic interest of the nation above the fiscal needs of the government. But in any case the process of nationalization must be gradual, and it must be kept free from political influence.[15]

Typical Forms of Municipal Management

The four distinct forms of municipal management are as follows:

First: Simple public administration.

Second: Autonomous public administration, the so-called "*Verselbständige kommunale Unternehmung.*

Third: Operation in the form of a company with private rights under system of municipal ownership (*rein kommunale Gesellschaft*).

[15] Eine Volkswirtschaftlichstatistische Untersuchung der deutschen öffentlichen electrizitätsversorgung.

Fourth: Operation in the form of a company with private rights with the cooperation of public and private capital (mixed-management company—*gemischtwirtschaftliche Gesellschaft*).

1. The original form of municipal operation was the simple public administration in which the municipalized undertakings were placed under the direct management of the municipalities, that is to say, under the management of the magistracy, council, and council committees. The operation of economic enterprises for the advancement of hygiene and health easily lent itself to the existing forms of municipal organization. This form of administration has the advantage of giving expression to democratic ideas since it draws the inhabitants, united in the community, into direct cooperation; but in the operation of such industries as electricity it proved to be cumbersome and inefficient. The outstanding disadvantage of the simple public administration method in practice has been the lack of flexibility which makes it difficult for the municipality to adjust the business to inevitable changes, fluctuations in the market, etc. But public administration has succeeded best where the municipality has been given great freedom in finances and organization.

2. The second form is the autonomous public administration (*verselbständige kommunale Unternehmung*). This form has the advantage of furnishing some of the favorable conditions found in commercial and industrial establishments. Under this form of administration the director of the utility is given wide discretionary powers; and the city council acts only in the most important matters, such as salary changes, the creation of new officers, the issuing of stock and rate changes. The practice in the city of Chemnitz is an excellent example of this method of administration. An administrative order of the city government names the administrative organs of the three municipally owned utilities—gas, electricity, and street railways—prescribes that each utility shall be supervised by a committee composed of three magistrates and seven councillors; defines the powers of these committees (*Aufsichtsräte*), of the magistracy, of the head of the department of public works (*Der Vorstand des Betriebsamtes*), and of the directors of each utility; prescribes methods of accounting and finance; and defines the relations of the utilities to the other departments, such as those of roads and police.[16]

It is well fitted also to the uniting of several municipalities for cooperative management in carrying on a common service (tramways, distribution of electricity, etc.).

3. The third form is the pure municipal company (*rein kommunale Gesellschaft, selbständige Gesellschaft*). Such companies were formed to gain a still greater flexibility, especially in rates, and in securing of capital. In this form the stock is owned and the directors are appointed by the municipality.

4. Mixed-management companies (*gemischtwirtschaftliche*

[16] Chemnitz, *Ortsgesetz für die Verwaltung der technischen Betriebe der Industrie und Handelsstadt Chemnitz, Verwaltungsordnung.*

Gesellschaft).[17] In this form of enterprise part of the stock (and usually the controlling part) is owned by the municipality and a part by private investors. This form has proved to be especially well adapted to the electrical industry and to street railways. It has become increasingly popular in recent years.

This form of operation has for its end the application (to a greater degree than in the third) of commercial forms of organization and methods of work, and also the cooperation of public and private capital. It secures not only the commercial point of view in municipal operations, but also lessens the financial risk to the municipality.

The chief criticism of this form has been that it may put in jeopardy the idea of municipal management and lead to a return of purely private management. In actual practice, however, municipalities have used the mixed-management system to further public interests in the situations where it did not seem necessary or expedient to dispense with private capital.

This form of management is found today especially where municipalities in extending their functions found strong private undertakings (enterprises) in the field. These undertakings were made to better serve public interests by the adoption of the joint management system.[18]

Dr. Norden's Observations

Dr. Walter Norden of the University of Berlin reports that since the war municipal electricity and gas works in many instances have been organized in the legal form of private companies. The original government management has been displaced by a company combining public and private capital and ownership in the form of a joint stock company.

Reasons for the changes are: (1) During the period of inflation it was easier for private business than public business to obtain credit. (2) Communal electric enterprises accepted private capital and a mixed directorship partly to escape the binding legislations placed upon public employment relative to wages, hours of service, etc.

Dr. Norden points out, however, that there is great uncertainty with regard to the future development of mixed management since municipal socialism is taking deeper and deeper root and there is today evidence that purely municipally managed enterprises are encroaching upon the field of mixed management.[19]

Rate Regulation

The municipal councils establish the rates for the municipally owned utilities; and in so doing they have in mind the fiscal needs of the municipality. Fiscal considerations have become especially

[17] P. Mitzlaff and E. Stein, *Die Zukunftsaufgaben der Deutschen Städte*, 911 ff; 933 ff.
[18] Dr. O. Mulert. *Die Wirtschaftliche Betätigung der Gemeiden*, in IV, Internationaler Kongress der Städte und Lokalverwaltungen (1929), p. 26.
[19] Dr. Walter Norden, information in letter to the writer, Dec. 1929.

important since the war. [20] Municipalities have also fixed rates with a view towards attracting industries. Chemnitz offers lower rates to the poorer classes of her population. But the prevailing practice is to fix rates so as to bring in a profit to the municipality. Bohmann argues that such rates constitute in effect an excise tax on consumers, and he holds that this is a most convenient and equitable form of taxation.

It may be added that municipal councils are practically independent of control from above in fixing these rates. Some of the *Länder* do enforce the requirement that municipally owned enterprises shall at least pay their own way.[21]

Personnel of Regulatory Boards

As pointed out above, there are in Germany no regulatory boards comparable to our state public utilities commissions or Interstate Commerce Commission. Such measure of control as is imposed from above is exercised by the regular administrative officials of the *Länder* and of the Reich. Of these officials it may be said in general that they are thoroughly trained, hold office for life, and are quite adequately paid for their services. The municipal control committees (*Aufsichtsräte*) are composed generally, it would appear, of municipal councilors and magistrates.

Concluding Observations

Germany's contribution to the experiment in the administration of public utilities seems to be the successful uniting of public and private resources for the development of the super-power electrical scheme. The government has refused to carry national socialization in the electrical field to its logical end, as outlined in the legislation of 1919, and has recognized that private capital may play an important part in the further development of the enterprise.

On the other hand influential private companies and individuals interested in the development of electrical enterprises for profit are willing to accept governmental control and governmental leadership. The individual in Germany, even though a capitalist, seems more willing than in most other countries to subordinate his immediate private gain to the welfare of the state. Such an attitude on the side of government and capital makes possible the rapid development of the superpower project in Germany which promises greatly to enhance Germany's position in industry and international trade.

A second contribution is seen in the success with which the cities of Germany have divorced politics from the management and operation of utilities.

Utilities managed by permanent municipal employees as well as those owned in part by the municipality are run entirely on a

[20] H. Weber, *Eine volkswirtschaftlichstatistische Untersuchung der deutschen öffentlichen Elektrizitälsversorgung*, p. 68.
[21] H. Bohmann, *Die Bedeutung der Gemeindebetriebe für die Gemeindefinanzen*, pp. 37, 95.

sound business basis with the spoils politics absolutely eliminated. Pride of management and permanent tenure have placed public operation on a plane as high as that of private enterprise with regard to efficiency of operation.

The ever present possibility of changing a private enterprise into a public enterprise seems to furnish a competitive relationship between the two systems which effectively protects the consumers' interests in rates and services.

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SWEDEN — PUBLIC UTILITIES

Introduction

The Swedish policy with regard to the electricity industry is of interest to Americans on account of the following outstanding characteristics:

1. The development of a policy of power generation, transmission and distribution under a system of competition and cooperation between public enterprises and private enterprises.

2. While the state owns and operates an increasingly large proportion of the generating and distributing plants the state has not taken (or been able to take) for itself any marked privileges or advantages with regard to its power development, over and above those granted to private enterprises.[1]

[1] J. Körner, *Sveriges Elektricitetsverksindustri (Swedish Electric Power Industry)*, pp. 27–53.

3. A national system of transmission is being developed which embraces the national government, communal enterprises, consumers' cooperative enterprises, and private companies.[2]

Present Status of the Electric Industry

The electric power industry in Sweden may be divided on the basis of ownership and operation into the following:

1. Government (national) enterprises.
2. Communal (municipal) enterprises.
3. Private enterprises.
4. Mixed (public and private) enterprises.[3]

From the beginning the private and communal plants shared about equally in the electrification of the cities. Out of 113 city electric plants some 60 were built as communal enterprises and the remainder, 53, as private enterprises. Gradually the cities bought up the private plants until in 1928 they were reduced to 25. At the present time there are no private plants in cities of over 20,000 inhabitants.[4]

The earlier municipal plants were both generating and distributing plants, but with the development of the great generating plants by both the private companies and the government the municipalities found it more economical to limit themselves to the distribution of energy.[5]

The proportion of the total energy in Sweden generated by the municipal plants is becoming smaller each year, while the amount generated by the national plants is increasing at the expense of those owned by cities and by private companies.[6]

The following statistics show the relative position of each generating group in 1926.[7]

State plants	34.0 per cent
Municipal plants	7.8 per cent
Private plants	
(a) for general distribution	26.2 per cent
(b) for private consumption	32.0 per cent

It is of interest to note that 58.2 per cent was generated by privately owned plants. The trend, however, is better brought out by a comparison of the above figures with those of 1913 which shows the share of the state in the generation of electric energy has increased from 14 per cent in 1913 to 34 per cent in 1926, the share of the communal plants has slightly decreased from 8.2 per cent in 1913 to 7.8 per cent in 1926, while the share of the private companies has decreased from 78 per cent in 1913 to 58.2 per cent in 1926.[8]

[2] Der Konigl. Wasserfallverwaltung, *Die Staatlichen Kraftwerke Schwedens.*
[3] J. Körner, *Sveriges Elektricitetsverksindustri*, p. 81.
[4] *Ibid.*, p. 87.
[5] *Ibid.*
[6] *Ibid.*, pp. 40–42.
[7] Translation of a letter from the Secretary of the Association of Swedish Electrical Companies (Svenska Elektricitetsverksföreningen), transmitted by John Ball Osborne, American Consul General, Stockholm, Sweden, Nov. 12, 1929.
[8] J. Körner, *Sveriges Elektricitetsverksindustri*, pp. 40–41.

Governmental Regulation

It is characteristic of Sweden that there is no governmental intervention or method of control over the distribution of electric power, except in matters pertaining to safety.[9] There is a board of inspectors (*Statens Electriska Inspection*) under the Royal Board of Trade (Dept. of Commerce) which inspects generating plants, transmission lines of high tension and installations. It also issues permits before operation can be begun.

Installations can be put in only by authorized or licensed electricians approved by the Royal Board of Trade.[10]

When the question of a national water power policy was before Parliament, which resulted in the Water Power Law of 1918, the advocates of greater state regulation tried to secure the enactment of a provision requiring private owners of electric enterprises to secure a concession from the state similar to the plan in operation in France. The proposal was to grant to the concessionaire a monopoly in return for which privilege the concessionaire was to be required to submit to the control of rates to be charged to the consumer, and subject further to the right of the state to take over the enterprise at the expiration of a given period. However, when the law was finally enacted it contained no provision for the granting of concessions by the state.[11]

Expropriation by the State

The law gives the state (but not the municipalities) the right to take over private plants by means of expropriation—but only forty years after completion of the plant, provided that the capacity of the plant is at least 500 horsepower. If the government does not make use of the right at the expiration of the forty years, it does not arise again for the same plant until the expiration of another forty years. In such cases the indemnity is fixed by a jury especially chosen for the purpose.[12]

There seems to be little or no tendency to create a state monopoly of water power or power production in general, since the state production amounts to only about one-third of the total. Since the state enterprises are required to be run on the same sound business principles as private power plants much of the risk of price competition detrimental to private companies is eliminated.[13]

Conflict Between State and Private Ownership

When the state became interested in state development of the water power resources it found the major portion of the power sites in the hands of private individuals and companies. The principle of riparian ownership, it was contended by the private interests, denied the state the right to take over and develop the power of the

[9] Letter from *Svenska Elektricitetsverks föreningen*, (Nov. 12, 1929).
[10] S. E. Osterberg, *Staten och Näringslivet*, p. 310.
[11] C. Kleman, *Power Policy* (in Sweden) in the Transactions of the First World Power Conference, Vol. IV, p. 1391.
[12] *Ibid.*, p. 1391.
[13] J. Körner, *Sveriges Elektricitetsverksindustri*, p. 98.

rivers and lakes without purchase or lease from the owners of the land bordering the water.[14]

The state, for the purpose of public power development, asserted a principle that had been maintained during the 16th and 17th centuries but later abandoned,—the principle that the state had a "royal right" to certain forests, fishing, mines and waterfalls.[15]

The controversy between the state and the private owners was carried to the courts and such suits were common for about ten years. The state ultimately lost in the suits.

The state depended upon the principle that the river was a public channel (*Kungsarda*), which principle involves the right of the state to prescribe what part of the flow should be reversed for public interests especially for navigation (now usually fixed at one-third). The state held that such part of the water belonged to the state and any surplus not used for navigation, etc., could be developed by the state or leased by it rather than by the riparian owner.[16]

The courts refused to sustain the contention of the state and the private companies gained security in their possession of power sites.[17]

By 1918 it became certain that the judicial practice in Sweden was to recognize the legal equality of state, municipalities and private owners in the possession of power sites. Parliament by that date also recognized the desirability of encouraging individual initiative in power developments and of drawing the resources of the great financial concerns into this field.[18]

National Power Enterprises

The state power enterprises are organized as business enterprises and run according to instructions issued by the King (National Administration) or Parliament.[19]

The immediate administration of the operation of the state electric enterprises is in the hands of the Royal Power Board (*Kungl Wattenfallsslyrelsen*).[20]

The Reichstag passed a law in 1908 for the establishment in 1909 of a State Waterfalls Board. Its powers and duties were further extended by a law which went into effect July 1, 1920. The special duty of the board was to take charge of, manage and operate, the property and business of the waterfalls, power plants, and canals and real estate connected with such works; devise and propose means for making the best use of the water power in the state; and provide for the transmission of power to those parts of the state where the needs seem to justify it.

[14] *Ibid.*, p. 82.
[15] C. Kleman, *Power Policy* (in Sweden) in Transactions of the First World Power Conference, Vol. IV, p. 1389.
[16] *Ibid.*, p. 1390.
[17] J. Körner, *Sveriges Elektricitetsverksindustri*, p. 85.
[18] C. Kleman, *Power Policy* (in Sweden) in Transactions of the First World Power Conference, Vol. IV, p. 1392.
[19] Letter from *Svenska* Elektricitetsverksföreningen (Nov. 12, 1929).
[20] J. Körner, *Sveriges Elektricitetsverksindustri*, pp. 29–48.

The Board, which holds its sessions in Stockholm, consists of a Director General, who is at the same time President of the Board, and four members. The members are not civil officials but are chosen from qualified private individuals. They devote only a part of their time to the affairs of the Waterfall Board. Of the members who have expert knowledge and who are versed in practical and business questions, there are, at present, one expert in road and water construction, one representative of industry, and one of agriculture, and, finally, one legal expert with special knowledge in questions of water power laws. The Director General and the members are entirely responsible for the management of the state waterfall board. In certain questions of major importance for the works they have to make a decision in common. Other questions to be settled by the board are, as a rule, decided by the Director General.

The Board consists of four bureaus, namely:

1. A power works bureau.
2. A canal-and-real-estate bureau.
3. A legal bureau.
4. A bureau of finance.

In addition to this there are two subordinate bureaus, namely: a a construction bureau, and a technical bureau.

General Functions of the Waterfalls Board

1. To administer the property and business affairs of the national hydro-electric plants.
2. To have charge of new construction.
3. To prepare and, with the sanction of the government, to adopt resolutions for the improvement of water power throughout the whole country.
4. To make provision for the transmission of electric energy to such points of the country where it appears that such a state enterprise may be useful.[21]
5. To take care of the rights of the state where the state has entered as a partner into water power development enterprises.[22]

Functions of the Bureaus [23]

To the Power Works Bureau belongs the management of those power works ready for operation, including distributing establishments and the sale of power. The Power Works Bureau takes part, further, in the planning of the waterpower stations, plans and assumes the responsibility for supplying electrical equipment for the same, plans necessary steam power works, gives orders for their

[21] Der Königl. Wasserfallverwaltung, *Die Statlichen Kraftswerke Schwedens*, pp. 5–6.
[22] Stockholm, *Betänkande avgivet av den av stadskollegiet tillsatta industriverkskommissionen, Den 8 November 1927.* (The commission with regard to public utilities chosen by the city council of Stockholm, 1927) *Report* Nov. 8, 1927.
[23] Swedish Laws A-102, *Arbetsordning för Kungl. Vattenfallsstyrelsen.* (Working orders for the Royal Waterfall Board).

machines and electrical equipment and directly constructs long distance conductors and transformer stations.

The work of the Canal and Real Estate Bureau embraces all questions as to management and traffic of the canals, the drawing up of architects' plans, and purchase of building lots in the industrial and residential sections under the control of the Water Fall Board, also the management of the real estate of the Water Fall Board.

The Legal Bureau appears in the court in all cases affecting the Waterfalls Board, advises the Board with regard to legal questions; and takes charge of the permanent records of the board.

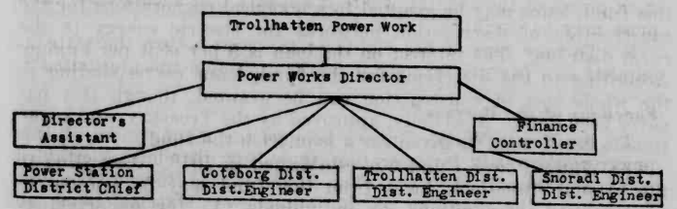
The duties of the Finance Bureau are to oversee the payment of bills, keep the financial books, audit accounts, and compile the yearly reports of the Board; and to settle questions as to the pay and pensions of the employees.

The Construction Bureau, cooperating with the Power Works Bureau, plans new waterpower works, and assumes directly the completion of them, exclusive of electrical equipment, plans and takes immediate charge of constructing and altering canals, erecting steam power works and constructing all works connected with the power works and canals.

The Technical Bureau has charge of drawing up plans for new waterpower works, and plans for construction required to regulate lakes and rivers.[24]

In each of the districts in which the state owns and operates electricity enterprises there are local boards which under the supervision of the several national bureaus mentioned above have charge of the actual operation.

The following chart shows the organization plan for a typical local power plant working under the state system.[25]



Financing State Enterprises

The capital necessary for state development of electric power systems is voted by Parliament. The task of furnishing the money is given to the branch of the Treasury Department having charge

[24] *Ibid.*, p. 6–8.
[25] *Ibid.*, p. 8.

of the national debt. In most cases the money is raised by loans, but in special cases taxes have been resorted to. In 1924 the state debt chargeable to state power plants amounted to about 210 million crown ($56,000,000).

It is interesting to note that the loans are real government loans and not mortgages against the property of the power plant. It is highly important for the national taxpayers that the sale of power from the state plants not only meets the running costs (including administration, salaries, maintenance, repairs, depreciation, interest, etc.), but also provides a sinking fund for the amortization of the government bonds. Otherwise taxes must be resorted to. In rare instances when the government has ordered the Board to start construction in order to relieve unemployment and the cost is not met by sale of power the public bears the increased expense.[26]

National Scheme for Power Development

The following are the most important factors in the scheme for nationwide power development in Sweden.[27]

1. Direct State ownership and operation (as explained above).
2. State subsidies to municipal and private development.
3. Cooperation between plants by means of interconnecting lines and pooling of power through a common "gridiron".

State Subsidies

The state system of subsidies for power development includes the operation of two funds (1) The Transmission Line Fund and (2) The Water Power Fund; and the policy of national financial bodies to grant loans for electrification of rural districts.

These loans are described as follows by C. Kleman in a paper before the First World Power Conference. . . .[28]

The Transmission Line Fund was established in 1918. From this fund, loans may be granted to economical corporations for the construction of distribution networks for electric energy in the rural districts. The interest on the loan is 5 per cent per annum. According to the directions for the fund, loans corresponding to the whole cost of construction can be granted, though this has never been done. A security, approved by the Treasury, and sometimes a bond, must be given for a loan from the fund. . . .

The Water Power Fund was established in 1919. According to the present directions, loans from this fund may be granted to communities, corporations, or individuals (1) for undertakings with the object of developing the State waterfalls or falls belonging to private concerns, in cases where the development is of public interest, (2) for certain small local power works with the object

[26] C. Kleman, *Power Policy* (in Sweden) in Transactions of the First World Power Conference, Vol. IV, pp. 1379–70.
[27] J. Körner, *Sveriges Elektricitetsverksindustri*, pp. 81–105.
[28] *Transaction of First World Power Conference*, Vol. IV, pp. 1386–1388. See also S. E. Osterberg, *Staten och Näringslivet*, p. 157.

of distributing electric current within the locality, and (3) for the regulation of lakes and rivers, when such undertakings are of general importance. Loans from the fund shall be granted with a view to developing, in the first place, non-utilized power resources, but may be granted also for plants already erected or in course of construction. At first the interest was fixed at 5½ per cent, later on it was increased to 6 per cent but now it is 5 per cent. The annual grants to the fund have hitherto been two million crowns (about £110,000) per annum. . . .

The loans from Transmission Line Fund have to be refunded in 20 years and the loans from the Water Power Fund in 43 years. Now it is prescribed that during the first two years interest only has to be paid on the loans from the former fund, while during the following 18 years, interest and amortization have to be paid off in equal yearly installments. On the loans from the latter fund interest only may be paid during the first three years, and then interest together with amortization in equal installments during the following 40 years. . . .

Furthermore, for the eletrification of rural districts loans have been granted by three government institutions, viz.:

	Crowns
Riksforsäkringsanstalten (The National Insurance Office) ..... about	850,000
Pensionsstyrelsen (The Board of Pensions) ..... about	11,400,000
Postsparbanken (The Post Office Savings Bank) ..... about	3,400,000
Total	15,650,000

These last three named funds, together with the above mentioned two funds, make a total of 31½ million crowns in loans for the development of electrical enterprises.

Cooperation, Transmission and Pooling of Power

In recent years cooperation between power plants (both public and private) has rapidly developed and has resulted in (1) conserving water resources through constructing or developing reservoirs and storage basins, and (2) pooling power through a common gridiron or net work of high tension lines. Already surplus power in certain plants is used to supply the deficits in production of others, while power resources have been stabilized during periods of water scarcity, and a more economical distribution of power has resulted.[29]

Recently a number of private companies in the province of Bergslagens have joined in a cooperative organization called the power administration. This cooperative organization has created a number of new lines for transmission of energy between the different parts of the territory, according to the interest to the several companies. They have adopted a uniform frequency of 50 cycles. The

[29] J. Körner, *Sveriges Elektricitetsverksindustri*, p. 99–100.

members maintain as far as possible their independence. A member supplies first his own needs and those of his customers. If there is a resulting surplus he disposes of it into the common net work, or if, on the other hand, he experiences a deficiency in the energy required, he buys from the common supply the amount necessary to meet the needs. The price of energy is based upon the cost of production and transmission and is determined by agreement among the members of the cooperative society. New connecting transmission lines are paid for out of capital, subscribed by the members. The changes in the private plants necessitated by the cooperative scheme are paid for by the plant itself. One great advantage of the scheme is that the association has been better able to gauge at all times the energy required, thus economizing and stabilizing at the same time.[30]

The distribution of electricity over the south of Sweden (two southern provinces) is dominated by the South Swedish Power Company (*Sydsvenska Kraftaktiebolag*). It was established in 1905. It is an excellent example of a "mixed" system of ownership. In this case six cities own 58.3 per cent of the stock (share capital) while private individuals and companies own 41.7 per cent. It is of interest to note that in 1926 the stock (share capital) amounted to 11,246,400 crowns, while the debts in the form of bonds secured by the municipalities amounted to 47,000,000 crowns or more than four times the amount of the stock.[31]

The company now owns fifteen or more hydro-electric power plants, several steam plants, a network of high tension trasmission lines and low tension distributing lines. Although dominated by a majority control in the hands of the cities the company is managed as a private business concern.[32]

An interesting example of state and private cooperation is found in the arrangement between the power plants of the state in the Trollhättan and adjoining power districts and the Västeras steam power plant. To make the interchange of power possible a 132,000 volt line has been built between Trollhättan and Västeros.[33]

A great central Swedish power system has now been developed, using Lake Vänern as a storage basin. This is capable of yielding 760,000,000 kilowatt-hours. The Trollhättan system in the west and the Alkvarlaby-Motala in the east have been interconnected by a transmission line of 132,000 volts, which links a large central power region. The time difference between minimum water supply in the two districts permits suplus power from one district to be used as supplementary power in the other.[34]

An interesting plan for securing extensions of lines in districts where neither private companies nor communes will take the risk is the so-called Hensjo system. It is substantially as follows: If

[30] *Ibid.*, p. 101.
[31] La chambre de commerce internationale établi par les soins du comité national Suédois. Rapport: *Gestion des enterprises publiques et privées en Suède*, p. 41.
[32] C. Kleman, *Power Policy* (in Sweden) in Transactions of the First World Power Conference, Vol. IV, p. 1581.
[33] J. Körner, *Sveriges Elektricitetsverksindustri*, p. 99.
[34] H. Quigley, *Electrical Power and National Progress*, p. 112.

a community desires a company to extend to it distributing lines, the consumers unite in a joint stock corporation for the purpose of raising money for the construction of the branch line transformer, and distribution lines. Each consumer signs a guarantee bond corresponding to his share of the electric current. On these bonds the corporation raises a loan. The money is furnished by the corporation to the company for construction. The company pays the corporation 5 per cent interest, and for twenty years following the first year the company repays in equal annual installments the amount of the loan. At the end of the twenty years the bonds are returned to the members of the corporation and the corporation is dissolved.

Probably such a plan for development is more feasible in Sweden than in many other countries for the reason that shares in private power companies have not been popular with the investing public. Even in the case of big private power companies the easiest method of raising capital is that of loans (bonds) on the security of mortgages on the property of the enterprise.[35]

Municipal Operation and Regulation

The distribution of electricity for lighting purposes and domestic and professional uses within the Swedish municipalities is largely in the hands of municipally owned and operated enterprises. Out of a list of 63 towns ranging from Askersund with a population of 2100 to Stockholm with a population of 453,300 fifty-three (in 1926) had municipal plants and ten privately owned plants.[36]

Types of Communal Plants

The communal plants may be classified under the following types:

First: The power generating and distributing type. Stockholm is an example of this type. Twenty-six towns are reported as having such a type.

Second: Plants which only distribute power.

1. Some of these plants take their power from the state power plants. Twenty-nine towns are reported to have such a system.
2. The important group receive power from the South Swedish Power Company. Eighteen towns have this system.
3. Those dependent upon private power companies for their electric energy. Thirteen towns are reported to have such a system.

In addition to the private plants and the communal plants classified above, there are the mixed types, owned in part by communes and in part by private interests.

It is reported that twenty-eight towns have this system. A majority of this type are for distribution only. These plants are as a rule organized and managed as share companies in which the municipalities participate by means of stock ownership.[38]

[35] C. Kleman, *Power Policy* (in Sweden) in Transactions of the First World Power Conference, Vol. IV, p. 1383.
[36] J. Körner, *Sveriges Elektricitetsverksindustri*, pp. 36–37.
[38] *Ibid.*, pp. 88–89.

An interesting example of cooperation between public and private capital is seem in the cooperation of the city of Stockholm and the private generating company *Sandvikens Jernverk* A.-B. They are developing a common power site on the river Dall. The development is being accomplished through a stock company incorporated for that purpose. Stockholm owns two-thirds and the private company one-third of the shares.[39]

There are a number of instances where two or more towns develop a water power plant through the organization of a special stock company. The financial side of the enterprise is usually arranged through the issuing of captial stock and bonds guaranteed by the towns.

The city of Skellefte has developed a system capable of supplying great private manufacturing enterprises and protects itself by contracts with the enterprises.[40]

By way of summary it may be noted that communal plants are owned either directly by the cities or through the ownership of all the stock. In the first case capital is obtained by means of amortization loans raised in the same manner as other municipal loans. To raise such loans the municipalities must have the approval of the national administration which considers the financial capacity of the municipality before authorizing the debt.

In the second case when the municipality buys stock in a company the capital is raised in the form of an ordinary municipal loan to be paid for by issuing mortgage bonds on the plant of the company, supplemented by a guarantee of the municipal government. It is claimed that as an investment such bonds are considered as good as regular municipal bonds.

The explanation of the large number of plants owned by cities through a joint stock company is the fact that many of the plants were purchased by the municipality from private joint stock companies.

The management of the municipal plant is usually entrusted to a special board appointed by the municipal council.[41] This board acts as a board of directors who have under them the same type of permanent staff of experts as is found in private compaines.[42]

Taxation

The power enterprises including those owned by the state and operated by the Waterfalls Board, and private enterprises, pay the regularly assessed municipal, district and road taxes, while the municipal plants are exempt. The state owned enterprises, however, pay no taxes to the state. Private and municipal plants pay property taxes to the state[43]

[39] *Ibid.*, p. 92.
[40] *Ibid.*, pp. 93–95.
[41] J. Körner, *Sveriges Elektricitetsverksindustri*, pp. 96–98.
[42] C. Kleman, *Power Policy* (in Sweden) in Transactions of the First World Power Conference, Vol. IV, pp. 1380–81.
[43] J. Körner, *Sveriges Elektricitetsverksindustri*, p. 96.

Observations

The success of public ownership and operation in Sweden seems to depend first upon the willingness of the state to cooperate on even terms with the private companies, and second, upon the creation of a staff of well paid experts with permanent tenure. The second factor is probably the more important.

The state, it is pointed out, has taken a leading part in the remarkable progress which has been made in the technical field of electricity development, especially during the last quarter of a century. State engineers have led the way, it is claimed, in the development of the technical side of the generation and transmission of electricity, and the state has been fortunate in securing the services of men of great skill and expert initiative on the waterfalls board.[44]

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NORWAY—PUBLIC UTILITIES

Electricity in Norway

Introduction

Public ownership and operation of generating plants, transmission lines, and distributing systems dominates the field in Norway much more than in Sweden. A majority of the electric lighting plants in municipalities are owned and operated directly by the municipalities. Waterpower, which is the dominant source of electric energy in Norway, is still largely in the hands of private companies, but under a system of regulation and control which has for its purpose the gradual and in time complete taking over by the state of the generating and transmitting enterprises. The policy of granting concessions containing legally binding provisions creates in Norway a system of strict regulation over the generation and transmission of power by privately owned enterprises.

Government Ownership of Water Power

For about forty years prior to 1917 the national government had purchased by agreement power sites when such purchase seemed expedient. Beginning in 1917 the government has taken up the policy of securing control of power sites by means of expropriation.[1]

The King (government) may, by the laws of 1917, take over power sites and developed falls, and power stations also when they are needed for supplying power for government purposes or for public use. Even in cases where private owners or communities desire to transfer to third parties power sites developed or undeveloped such transfer cannot take place until the government has had an opportunity to use its option of purchasing the property. Such purchase by the government is subject to ratification or veto by Parliament.[2]

National Regulation by Concession

A concession from the government is necessary for any one other than the state or community (subordinate unit of government—the commune, etc.) "to acquire with full legal effect property right or right of usage to water falls."[3]

An exception to the above is that a Norwegian citizen may acquire such right through inheritance or marriage.[4]

[1] Law of June 7, 1917 cited by H. Larssen, *Review of the Legislation on Water Power and Electricity of Norway,* in Transactions of the First World Power Conference, Vol. IV. p. 1527.
[2] Norges Storting, *Lov om erhvervelse av vandfald, bergverk og anden fast eiendom, av 14 December 1917.*
[3] *Ibid.* Art. 1, sec. 1.
[4] *Ibid.* Sec. 2.

To Whom Granted

Concessions are granted to Norwegian citizens, joint stock companies or other companies with limited responsibility under Norwegian management and financed by Norwegian capital.[5]

Under special circumstances concessions may be granted to companies composed in part of foreign citizens, but then only when the management has its seat in Norway, and only in case a majority of its members are Norwegian citizens. Special conditions determined by the government are imposed upon such a concessionaire.[6]

By Whom Granted

The concession is granted by the King (National Administration) unless the waterfall is capable of being developed to more than 1,000 horsepower (5,000 horsepower in case of part foreign ownership) or in case the concession involves important interests, in which events the concession is given only upon approval of Parliament.[7]

Conditions Usually Included in Concessions

1. Provisions intended to prevent undesirable mergers: In the case of concessions granted to companies provisions are stipulated which aim to prevent a majority of the stock falling into the hands of another waterpower company in Norway. Stocks or shares must be "personal," and cannot be sold or mortgaged to anyone but the Norwegian state, the Bank of Norway, Norwegian local governments and Norwegian citizens. Sale or mortgage may be made to Norwegian companies, or other Norwegian banks only with the sanction of the National Department of Labor.

The company is required to keep a record of its members, with their residence and proof of their right to citizenship.[8]

2. Capital requirements: The law requires that the share capital of the company shall constitute at least one-third of the expenses of the acquisition of property, constructing dams, power stations, transmission lines and factories (if any). Thus not more than two-thirds of the initial capital may be raised by bonds or mortgages.

3. Limits to use of power: At the discretion of the government the concession may contain limits upon the use of power. It may be stipulated that the power must not be used for certain types of industry; or that it shall be used for one single industry or type of industry. Usually, however, it is stipulated that the King may extend the rights of the concessionaire.[9]

4. Time limit: Time limit for beginning and completing the development is stipulated, usually two years being named for beginning and five years for completing the development. The King may make exceptions to the rule in exceptional cases.[10]

[5] *Ibid.* Art. 2.
[6] *Ibid.* Art. 4.
[7] *Ibid.* Art. 2.
[8] *Ibid.* Sec. 2.
[9] *Ibid.* Sec. 2.
[10] *Ibid.* Sec. 5–9.

5. Provisions favoring Norwegian citizens and industries: The concessionaire is obliged as far as possible to employ Norwegian citizens only. Preference also is to be given to Norwegian products, materials, and insurance.

The concessionaire is required to furnish to employees "healthful and satisfactory accommodation and plots for the erection of their own homes, with roads, water, toilet, and electric lights, and also ground for meeting place, etc., for a store for coöperative or other trading activity and the like . . . all according to detailed rules of the government department concerned."

It is further required that a fund for the aid of the poor in the parish must be set aside from the earnings of the plant.[11]

6. Rates: The concessionaire of water power may not, without consent of the government (Dept. of Labor) enter into any agreement for the future increase in the price of energy used in Norway or in the price of products which are obtained through energy.[12]

7. Exportation: The law distinctly prohibits the exportation of electric energy derived from water power under a state concession without permission granted by the King (government).

8. Regulation of the sale of raw materials produced directly by energy from water power: Agriculture and industry are especially favored by requiring that the concessionaire sell at *reduced prices,* or at a *fixed price* determined by the interested national department, a portion of the commodities produced by means of electric power and used by Norwegian agriculture or Norwegian industry. Such prices are to be fixed by the government on the bases of cost of production plus a reasonable profit.

It may be required also that raw materials or "half-fabricated" materials produced from the use of state controlled water power shall be, as far as is possible, manufactured in Norway and not exported to manufacturers in other countries. The specific rules in individual cases for the application of the above principles are to be made by the department of labor.[13]

9. Preferential service to the locality: The concessionaire is required to deliver electric energy, not to exceed 10 per cent of the average power which the developed falls can produce, to the community where the plant is located or to neighboring communities or communities designated by the department of labor.

The units of local government have the right to use such power as they see fit.

An additional 5 per cent of the average power may be reserved by the state. The state may consign its share wholly or in part to the local community. In special or exceptional cases either a higher or a lower limit may be fixed in the concession.[14]

[11] *Ibid.* Sec. 10.
[12] *Ibid.* Sec. 11.
[13] *Ibid.* Sec. 11.
[14] *Ibid.* Sec. 12.

Tenure of the Concession and Redemption Privileges

A concession is granted to run for a definite period not to exceed 50 years, except that with the approval of Parliament it may run for a period of 60 years. At the end of the concession the water fall and all of "its appurtenances whereby the water's course and bed are altered, such as dams, canals, tunnels, basins, pipe lines, etc., which belong to the power plant, revert to the state with full property rights and without payment." That which does not revert to the state, the state may redeem for its value according to judgment at its expense, or demand its removal within a period fixed by the department of labor.[15]

If a shorter period is not fixed in the concession the state may redeem the whole plant in the 35th year after the concession is granted. The redemption price shall be determined in such a way "that the waterfall with the ground plots and rights that go with it, together with hydraulic constructions and houses shall be paid for at what it can be shown they cost the concessionaire, with reduction for the depreciation for the part of the concession-time elapsed." Pipe lines, machines, and other appurtenances shall be redeemed at the then technical value according to judgment at the expense of the state.[16]

Regulation of Rates

Power is sold by the concessionaire at a maximum price. The maximum price is fixed by agreement between the department of labor and the concessionaire, or in want of an agreement it is determined "by judgment." The basis for determining the maximum price is the cost of production including six per cent interest on the actual capital invested in the plant plus 20 per cent.

Revision of the maximum rate at intervals of time may be provided for in the concession. If the concessionaire sells power in bulk to distributing enterprises, the state or the community may demand the same price under similar conditions and circumstances.

If the price on the above basis is unreasonable on account of the utilization of a small part of the water powers which the development is capable of producing, the government may demand the sale of the power at a miximum price comparable with the prevailing price of distribution in the district.[17]

Since electric energy in Norway is almost exclusively produced from waterpower, and since the annual expense of a plant is nearly constant and has little relation to the amount of energy actually produced by the plant, the policy adopted in general is to develop the demand for the use of electricity by sale of energy at a low rate.

Rates are often fixed according to the purchasing power of the customers. The policy of charging a fixed rate per watt per year is the most common method of charging, although a charge per kilowatt hour is also used in some instances. So far separate meter-

[15] *Ibid.* Sec. 17.
[16] *Ibid.* Sec. 19.
[17] *Ibid.* Sec. 12.

ing for lighting and cooking is rarely used. Power is in the main charged for on flat rate per kilowatt installed, and energy sold in bulk is likewise mostly charged for on the basis of the flat kilowatt per year on the mean of several 15 minute period peak loads.

The above method has the advantage of being simple to administer and also encourages the greater use of current.[18]

Taxes

The concessionaire is required to pay a yearly tax to the state of not less than 10 øre (1/10 of a crown or 2.7 cents in U. S. money) and not more than 3 crowns (81 cents) per horse-power, reckoned on the average power of the average of the falls year by year.

A tax of not less than 10 øre or more than 4 crowns per horse-power may be imposed by the local government units in which the plant is located. If a further tax is imposed upon the concessionaires incorporated for regulating the flow of water, etc., such tax is to be deducted from the above.

The detail of taxation may be provided by the government department upon advice of the Waterways and Electric Power Service (Hovedstyret for Vasdrags og Elektrisitetsvesen).

Taxes under certain circumstances may be reduced or remitted by the King or Parliament.[19]

Other Regulations of the Government Over Water Power Concessionaires

Distribution: Many technical matters connected with distribution are regulated directly by governmental departments. Such matters include standard frequency, rules for transmitting power from the generating station through transformers to transmission lines and distributing systems. Power may not be shut off without consent of the government department.

Government Supervision: Government inspection and supervision are imposed upon plants in connection with the building of the plant and subsequent maintenance and operation. The labor department is required by law to see that the governmental regulations and rules agreed to in the concession are obeyed.[20]

The agency created by the department to perform this function of supervision and control is the "controller." Appeal to the department from the decisions of the controller is allowed. The expenses of control and supervision are charged to the concessionaire.[21]

Water Course Regulation in Relation to National Scheme for Power Development

The regulations affecting the development of water courses and storage basin have a direct bearing upon the national development of electric energy.

[18] Joh. A. Haga, *Electricity Rates in Norway*, in Transactions of the First World Power Conference, Vol. IV, pp. 405–408.
[19] Norges Storting, *Lov erhservelse av vandfald, bergverk og anden fast eiendom. av 14 december 1917.* Art. 2. Sec. 13.
[20] *Ibid.* Art. 2, Sec. 15.
[21] *Ibid.* Sec. 17.

Individuals or companies desiring to develop water course or storage basins or regulate the same for the purpose of producing electric energy may do so only after acquiring a concession similar to the one required for the acquisition of power sites explained above.[22]

Concessions for developing waterpower resources: The request for a concession to carry out a regulation-undertaking must be sent to the department of government concerned and generally be accompanied by:

a. a complete plan together with necessary measurements, surveys, explanations, drawings, computations and estimates as to cost;
b. a statement of the advantages which the undertaking is reckoned to carry with it, and of the increase of that waterpower which thereby may be brought about or may be utilized;
c. information as to how far and in each instance to what extent the undertaking may be judged to bring with it injury or disadvantages to public interests, such as road traffic, floatage or fishing, changing of the natural conditions or the like;
d. a statement (in each instance with computations of area) about the damage or danger which the undertaking is judged to cause to land, forest, pasture or other property, or property right, regardless of whether this damage or danger is caused on one's own or others property or property right;
e. for regulation-dams, a proposal for the regulation of the work;
f. a complete report of the useful falls in the watercourse concerned, together with a statement of the conditions of the water flow;
g. notice that there has been given, to all owners of works and waterfalls lying below, the opportunity to take part in the undertaking.[23]

Such concessions are granted for a period of 50 years which may be extended to 60 years with the consent of Parliament.[24]

Communities (local governments) may obtain such regulation-concessions for an unlimited time when such concession does not put in jeopardy any other public interests.[25]

The state has the same right of redemption of the property of regulation concessions as it has in the case of power sites and plants acquired by purchase or lease under a concession. Provisions relating to taxation and to rates are, in the main, the same for regulation enterprises as for the power sites and power plants

[22] Norges Storting, *Lov av 14 december 1917 om vasdrags-reguleringer*, Art. 4.
[23] *Ibid.* Art. 5.
[24] *Ibid.* Art. 10, Sec. 1.
[25] The units of local government in Norway are (1) "By" (Towns) (2) "Herred" (Rural Communities) and (3), "Fylke" (Counties).

concerned. The so-called social regulations such as housing of employees, etc., are substantially the same in both instances.

Share of Local Governments in Power Development

The units of local government consisting of towns, rural communities and counties are given advantages not offered by private bodies in the field of electrical development.

Local government units may acquire water power sites by purchase without the necessity of applying for a concession, except in case the site is already subject to a concession. In such a case the community accepts the conditions and agreements which were binding the seller at the date of sale. In case the community has acquired the power site for its own use it may apply for a modification of the tenure of the concession and also the terms giving the state the right of ultimate redemption of the power works.

Furthermore, the local governments may acquire water power sites by expropriation under the following conditions:

(a) The object of the purchase must be to satisfy the needs of the Community or its inhabitants for power, for lighting, heating, farming, handicrafts, or other industrial purposes, and the quantity to be disposed of is thus dependent on the size of the Community, the number of its inhabitants, etc.

(b) Such right of expropriation only applies to waterfalls which are not yet developed, or are only developed for half of their available power by a reasonable regulation of the stream flow.

That which a Community has acquired by exercising such a pre-emption cannot be transferred without the sanction of the King. The right of pre-emption vested in the Rural Communities, Towns and Counties, is given preference to the right vested in the National Government. The National Government, therefore, cannot exercise its preemption if the local governments wish to exercise theirs.[26]

Local Governments and Development of Water Power Resources

Local governments may also participate in the development of water courses and storage basins. They are authorized to undertake such developments by a concession similar to that received by a private individual or company. They, again, possess certain advantages, for example, the concession is for an unlimited period, if the power to be developed is to be used for the needs of the Norwegian Community.[27]

[26] H. Larssen, *Review of the Legislation on Water Power and Electricity of Norway*, in Transactions of the First World Power Conference, Vol. IV, p. 1528.
[27] Norges Storting, *Lov av 14 december 1917, om vasdrags-reguleringer.*

Local governments are exempted from paying royalties to the King and taxes to the national government.

Personnel and Salaries of Agents of the Electrical Power Service in the Department of Labor (Hovedstyret for Vassdrags— og Elektrisitetsvesenet).

Division for watercourse and electric systems comprise the body which is of special interest in this investigation. Among the duties of this division are: administer the watercourse and electric systems, supervise their systems of budgets and accounts, advise or determine questions concerning watercourse laws, the utilization of watercourses for traffic, floatage, etc., permission for the conduction of water for household use, compulsory relinquishment of waterfalls to communities, administration and damming of the state's waterfalls, purchase of waterfalls for the state, supply of electricity to the public, watercourse regulations for industrial purposes, concessions for the acquisition of waterfalls, and the renting of electric energy.

I Management—Personnel and Salaries

The officials and employees with their salaries are as follows:

General Director	20,000 crowns	($5,400)
Directors (three)	15,000 crowns	($4,050)
The members of the chief directing body chosen by Parliament	5,500 crowns	($945)
Some (five) members of the body are chosen by Parliament for a period of three years.		
Chief Engineers A, (twelve)	12,000 crowns	($3,240)
Chief Engineers B,	10,000 crowns	($2,700)
Division Engineers A, (sixteen)	7,500 crowns	($2,025)
with three increases of	500 crowns	($135)
after 2, 4, and 6 years.		
Division Engineers B, (nineteen)	6,000 crowns	($1,620)
with three increases of	500 crowns	($135)
after 2, 4, and 6 years.		
Assistant Engineers (seventeen)	4,000 crowns	($1,080)
with three increases of	500 crowns	($135)
after 2, 4, and 6 years.		
Head cashier	6,000 crowns	($1,620)
with three increases of	500 crowns	($135)
after 3, 6, and 9 years.		
Head Bookkeeper	same as above.	
Technical assistants	3,500 crowns	($945)
with four increases of	500 crowns	($135)
after 3, 6, 9 and 12 years.		

II Supervision of Electric Plants

There are six districts for this purpose. Each district has a supervisor who gets the salary of a Division Engineer, Class A ($2,025), with the increases allowed this class.[28]

[28] *Norges Statskalender* for Aaret 1929, pp. 691–3.

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SWITZERLAND — PUBLIC UTILITIES

Introduction

National Policy

The Swiss Federal Government in contrast to the cantons and communes plays a comparatively minor role in the ownership, operation and regulation of public utilities.

There is no Federal, and in fact no cantonal, regulation of gas companies. The majority of the 85 gas plants in Switzerland are municipally owned. In the few instances where the plants are privately owned and operated they are subject to municipal concession and regulation.

The Federal government does not regulate purely municipal tramways and motor bus lines, although statistical data concerning such enterprises must be filed with the department of Post and Railways. Interurban and intercantonal electric railways and motor bus lines, however, are regulated by the Swiss Federal Department of Post and Railways.

In the field of the electric utilities the Federal government plays a somewhat more important part. Federal ownership of power plants and distributing systems has not been adopted in Switzerland, except in rare instances where the government has decided that public ownership of a plant is the most effective means of supplying its requirements for energy.

Of the 103 Swiss power generating enterprises with 192 power plants:

(1) 46 with 85 plants are municipally or cantonally owned:
(2) 16 with 40 plants are enterprises of mixed ownership, owned in part by cantons and municipalities, and in part by private persons or companies.
(3) 41 with 67 plants are privately owned.

The first have an installed power of 167,320 kilowatts.
The second have an installed power 398,690 kilowatts.
The third have an installed power of 15,590 kilowatts.

It should be noted that the above figures do not include private plants generating energy solely for their own use.

An analysis of the above figures[1] shows privately owned plants possess only about 3 per cent of the total kilowatt capacity, while the mixed ownership enterprises possess more than two-thirds of the total.

Municipalities therefore control through stock ownership or direct municipal ownership all but an insignificant portion of the energy generated for distribution in Switzerland. In the few municipalities where the electric system is not municipally owned the municipality exercises control over rates and services. Under the above situation there seems to be no occasion for the development of a system of strong Federal control.

The cantons, not the Federal government, are considered to be the owners of water rights on the rivers and lakes, therefore in general the concessions for hydro-electric development are issued by the several cantonal governments.

The Swiss Federal Water Power Commission

There is however a Federal Bureau for Waterways and Water Power (*Eidgenössiches Amt für Wasserwirtschaft*) which exercises a number of important supervisory and administrative functions relating to electrical enterprises, among which are:

1. General supervision over the utilization of waterways, and especially the utilization of water power by hydro-electric enterprises.
2. Supervision over the issuance of concessions in the case of frontier and inter-cantonal sites.
3. Control over the export of electrical energy, which can be transmitted and sold abroad only upon a permit of the Federal government.
4. Intervention in case the cantonal concessions appear to be contrary to public interest, and to destroy natural beauty unduly, etc.

It should be noted here that the Federal government does not directly dictate rates to be charged by concessionaires, nor does it supervise standards of service, extensions, financing, consolidations or mergers.

The optional right of the canton to include such regulations in the concession, the inevitable competition with publicly owned enterprises and the municipal control over rates and services seem sufficient to prevent extortionate rates from being charged by private enterprises.

Advisory Commission

In addition to the Federal Water Power Commission, there has been established by law[2] a commission on Hydraulic Economy (*"commission fédérale de l'économie hydraulique"*) whose functions it is to study and advise the Federal Council with regard to

[1] Furnished by the Swiss *Eidgenössisches Amt für Wasserwirtschaft*

[2] L'Assemblée fédérale de la confédération suisse, *Loi fédérale sur l'utilisation des forces hydrauliques* (Du 22 décembre 1916). Art. 73.

river navigation and the utilization of electric energy,[3] as well as to propose remedial legislation.

Although the members of the commission are paid only a nominal fee (30 francs) for each meeting attended plus a second class railway ticket, they are authorized to engage technical assistants to gather data on specific questions under investigation and pay them "according to the rates prevailing in the Swiss society of engineers and architects."[4]

Relation of the Federal to Cantonal Government in the Field of Public Utilities

By federal law the cantonal legislatures have the authority to provide for the disposal and utilization of power rights on the public water courses.[5] But in case of the utilization of a water course situated on the territory of several cantons, the Federal Council renders a decision when the cantons involved cannot reach an agreement. The decision is made after the cantons and all interested parties have been permitted a hearing before the council.[6]

Federal law denies to the canton the right to prohibit entirely the transmission of electric energy to another canton. Restraint upon exportation of energy is limited by "the measure to which the public interest of the exporting canton justifies restraint." In case of a conflict between cantons with regard to exportation, the Federal Council makes the decision after taking into consideration the principle cited above.[7]

In case the cantonal government grants the utilization of water power to some other than the commune, and the person or company possessing the right of utilization neglects to utilize the power, the parties affected may appeal to the Federal Council, whose decision is final.[8]

The Federal Government may take over power from a public watercourse for its own use "to accomplish tasks which are incumbent on it," but it is obliged to reimburse the canton for the loss (if any) of duties or taxes accruing to it from the power enterprise.

The Federal Assembly may provide for the creation of storage basins, and the regulation of water level of lakes. Cantons must first be heard, and the final consent of a canton is necessary if the development "seriously affects the people or property in the canton."

The Federal Assembly divides the expense between the confederation and the cantons. The cantons in turn may distribute

[3] Le conseil fédéral suisse, *Règlement de la commission fédérale d'économie hydraulique* (Du 15 septembre 1917).

[4] *Ibid.*

[5] L'Assemblée fédérale de la confédération suisse. *Loi fédérale sur l'utilisation des forces hydrauliques* (Du 22 décembre 1916). Art. 2.

[6] *Ibid.* Art. 5.

[7] *Ibid.* Art. 9.

[8] *Ibid.* Art. 11.

the cantonal share of expense among the communes and companies in proportion to the advantage each derives from the project. If there is a contest the Federal Tribunal (court) decides.[9]

If an enterprise affected with public interest fails to obtain from the canton the right to expropriate the power rights (including necessary land) belonging to a riparian owner, the Federal Council may grant it to him.[10]

Direct Federal Control

Under the law which gives the confederation the authority to "exercise high surveillance over the utilization of hydraulic forces of public and private water-courses,"[11] the Federal Council has the right to issue decrees of a general nature for the development and utilization of hydraulic power; and to examine projects for power plants to the end that they may conform to the rational utilization of hydraulic power.

Consent of the Federal Council must be secured for importation of power from foreign countries.

Authorization of the Federal Council is necessary for the establishing of a power plant on a water course improved by federal funds.[12]

The right to export power to a foreign country is granted by the Federal Council. The law provides that the authorization shall be withheld if the exportation is contrary to the public interest and if it appears that the water or energy will find a suitable utilization in Switzerland during the time for which the authorization is asked. Authorization to export power is granted for a fixed period of time and under conditions fixed by the Federal Council.[13]

The Swiss Federal Council, in an ordinance dated Sept. 4, 1924, established the main outlines of the Swiss policy relating to exportation of electric energy.[14] The ordinance provides that the Federal Council appoint a commission of five members to give advice on petitions for authorization for exportation of electric energy. The members serve for a term of three years and represent equally the consumers and the producers. The commission is presided over by the Chief of the Federal Department of the Interior.

Authorization to export is refused if it is contrary to public interest and if the power can be suitably utilized in Switzerland during the period of time named in the petition.

The Federal Council in granting the authorization stipulates the maximum power, a given quantity of energy, and the duration of time, and other conditions which appear necessary to the council. The duration of time as a rule cannot exceed 20 years.

[9] *Ibid.* Art. 15.
[10] *Ibid.* Art. 19.
[11] *Ibid.* Art. 1.
[12] *Ibid.* Art. 20.
[13] *Ibid.* Art. 8.
[14] Le Conseil fédéral suisse, *Ordonnance sur l'exportation de l'énergie électrique* (Du 4 septembre, 1924).

Revocation of the concession or authorization is provided for in case public interest demands it, subject, however, to just indemnity.[16]

The concession is automatically terminated by non-use for two years after the date of the grant or by an interruption over any two year period of the exportation.

The ordinance sets forth in detail the procedure to be taken by the petititioner and the government. The petitioner must present all pertinent information and publish it twice at his own expense in the Swiss Journal of Commerce (*Feuille Fédéral*).[17]

Interested cantons and other interested parties who may oppose the exportation are given ample opportunity for hearings at which the petitioner may have an opportunity of answering the opposition. The Federal Water Power Commission (*service fédéral des eaux, or Eidgenössiches Amt für Wasserwirtschaft*) compiles all the data for and against the petition and transmits them, in a confidential document, to the commission. The commission after thorough examination and consideration in the light of public needs submits in writing its conclusions with regard to the petition to the Department of Interior, which in turn transmits the petition along with the department's views to the Federal Council for its final action.[18]

The documents which the petitioner must submit are of interest as follows:

a. the contracts for the furnishing of energy concluded between the petitioner and the foreign consumer, either in the original or in a legal copy,
b. a document indicating the origin of the energy destined for exportation,
c. a general plan of the transportation lines between the place of production of energy and that of delivery to the consumer,
d. propositions concerning the installations for the purpose of measuring and controlling the energy furnished,
e. a statement specifying the quantities of energy already furnished in Switzerland as well as in foreign countries, the quantities still available in the existing plants, or plants to be created, and finally the quantity of energy which the petitioner will get from other plants,
f. the proof that the petitioner is first interested in satisfying the needs of the Swiss consumer.[19]

One of the provisions most interesting to an American is that which prescribes that the exporter must offer his energy to Swiss consumers at a rate at least as advantageous as that at which he supplies foreign consumers.[20]

[16] *Ibid.* Art. 3.
[17] *Ibid.* Art. 6.
[18] *Ibid.* Art. 9.
[19] *Ibid.* Art. 13.
[20] *Ibid.* Art. 14.

If there is a controversy over the rate to be charged to the Swiss consumer the commission on the exportation of energy may designate experts to investigate and report. The expenses of such experts are charged to the interested parties, i. e. the petitioner and the consumer.

The supervision of exportation after the authorization is made is in the hands of the Federal Water Power Commission whose duty is to check up on the maximum power and the quantities of energy exported and to see to it that the prescribed limits are not overstepped. The exporters must furnish to the Federal Water Power Commission all the data necessary for control and at the end of each year they are required to report the amount of receipts accruing from the export of energy.[21]

An export duty per annum is charged amounting to 30 centimes per kilowatt-year, calculated on the maximum authorized power. During the period between the authorization of exportation and the actual beginning of exportation the annual duty is 20 centimes per maximum authorized kilowatt year.[22]

Federal Jurisdiction Over Electric Installations

The Federal Council is given jurisdiction over electric installations. The regulations concerning such installations are published in the form of decrees. The chief function of such regulations is to protect and guard against inconveniences and dangers which threaten from electric installations.

The edicts or decrees of the Federal Council govern the following:

a. Establishment and management of installation according to strength of current.
b. Precautions to be taken for the establishment of electric lines which are parallel or which cross one another, as well as for the establishment of electric lines which cross or are parallel to railroads.
c. The construction and maintenance of electric railroads.[23]

The council may grant the right of expropriation to properties of electric enterprises for the installation of transmission lines and distribution lines.[24]

The council likewise determines the tension permitted for the different types of electric installation for current of high voltage.[25]

The Federal Council is aided by a commission on electric installations consisting of seven members who are selected from individuals trained in the electric science and in the technique of installation.[26] This commission gives advice and information preliminary to the issuance of decrees of regulation by the council.

[21] *Ibid.* Art. 19.
[22] *Ibid.* Art. 21.
[23] L'Assemblée fédéral de la Confédération suisse, *Loi fédéral concernant les installations électriques à faible et à fort courant* (Du 24 juin 1902). Arts. 1, 3.
[24] *Ibid.* Art. 43.
[25] *Ibid.* Art. 14.
[26] *Ibid.* Art. 19.

The administration and enforcement of the decrees are vested partly in the appropriate bureaus of the department of posts and railroads, and partly in a board of inspectors designated by the Federal Council. Appeal may be made from the decisions of the above to the Federal Council.

The law provides in detail for the procedure in expropriation of land and other property for electric installations. The petition is submitted to the board of inspector of electric installation. Their recommendations are presented to the Federal Council which grants the right, if no opposition is made and filed within thirty days. Final decision is reached by the council. In case the right is granted and an indemnity is asked by those dispossessed, the question of indemnity and the amount allowed is determined by an "estimate commission" of three members. Such a commission is created in each canton, the members of which are named as follows: one each by the Federal Tribunal, the Federal Council and the government of the canton. Appeals from the commission are decided by the Federal Tribunal.[27]

National Schemes for Generation and Transmission of Electric Energy

The national government indirectly influences the development of a national scheme for the generation and transmission of electricity as follows:

1. By means of development of navigable rivers. In some instances the national government subsidises, for their financial support, cantonal, municipal and private development of power projects.
2. Through exerting control over storage basins and water levels of lakes; and in some instances in the actual development through Federal funds of such power resources.
3. Through the Federal grant of concessions to inter-cantonal power enterprises and power enterprises bordering the frontier.
4. Through the control and regulation of the exportation of electricity to foreign countries.
5. Through the Federal limitation upon unjustifiable restraint attempted by a canton on the transmission of power from one canton to another.

Direct influence upon the development of national schemes is exerted as follows:

1. For the purpose of the better utilization of the development of hydro-electric energy, the Confederation may after a hearing determine the water level and the drainage of lakes, and may provide for the creation of new storage basins. The Federal Assembly decides upon the distribution of expenses for such development between the Confederation and the cantons.[28]

[27] *Ibid.* Arts. 50–54.
[28] L'Assemblée fédérale de la confédération suisse, *Loi fédéral sur l'utilisation des forces hydrauliques* (Du 22 décembre 1916). Art. 15.

2. The Confederation exercises jurisdiction over the development and sale of power sites on lakes and storage basins created or developed through the participation of Federal Funds.
3. The national government may exert a considerable influence on the development of the national system through the right of the Federal Council to force the several users of current to form a cooperative society, in case such users may derive a notable advantage from such an association. This right belongs first to the cantonal government, but in case the rights of utilization are of interest to the territories of several cantons and if the cantons cannot agree, the Federal Council then may require the forming of such a society. This is done, however, only at the request of a majority of the interested parties, representing a major part of the power distributed in the territory.[29]

It is interesting to note that the national developments of power resources are also furthered by the electrification of railways which included at the end of 1928 half or more of the entire federal system. Two power station groups have been developed to furnish power for railways, one on the Gotthard sector and the other on the Wallis sector. The estimated cost of the power stations at full development was 162 million francs. Transmission lines have been erected to connect these groups of stations with three transforming stations and 22 sub-stations. The estimated cost of the transmission and distribution lines was 100 million francs.

The national system has been somewhat aided also by great power finance corporations. Such financial institutions as *Motor-Columbus*, the *Banque pour Enterprises Electrique* and the *Société d' Industrie Electrique*, are a dominant influence in financing power developments and at the same time are allied with the great electrical equipment manufacturers such as the *Brown Boveri Company*. A high tariff wall, moreover, helps the electrical manufacturers by preventing foreign penetration into their home market.

The financial backing of power development by the great financial institutions interested in electrical equipment by the cooperation of the cantonal, municipal and private interests in local development, and the nation-wide desire to place Switzerland in the forefront in the competition for world markets, are among the more important factors leading to the national system of power development. [30]

Financing and Functions of the Federal Water Power Commission

The expenses of the Federal Water Power Commission (*service fédérale des eaux*) are met mainly from the general revenue of the government. The expenditures of the commission during 1928

[29] *Ibid.* Arts. 31 to 36.
[30] British Electrical and Allied Manufacturers Association (Inc.) *Beama Special Publication No.* 1. *The Swiss Electrical Industry*, pp. 13–15.

were 712,344 Swiss francs, or about $142,460. From the above discussion, however, it is evidence that the interested parties, i. e., the consumers and concessionaires, bear the expenses of investigations under certain conditions.

Personnel

The Commission consists of five members. The director of the commission is an engineer. His four colleagues appointed as chief of sections or bureaus must include one attorney. The staff of the bureau is as follows:

a. Chief clerk.
b. Bureau engineers, 13.
c. Technical employees, 17.
d. Secretaries, 2.
e. Draftsmen, 5.
f. Office clerks, 4.
g. Employees in charge of engineering, equipment and supplies, 2.

In addition to this regular staff the commission has the authority to employ special assistance when occasion demands.

Tenure and Salaries

The commission and their staff are all under civil service and have a life tenure, with the privilege, however, of transfer to other departments. They are entitled to retirement with pension. The director of the bureau receives the maximum civil service salary of 17,000 francs a year, and a cost of living allowance not exceeding 480 francs, together with additional allowances for children not to exceed 120 francs. His total salary probably would be about $3,300 in American money. The chiefs of the sections, his immediate associates on the commission, receives salaries ranging from 9,000 to 17,000 francs. The engineers in the bureau receive from 8,000 to 11,600 francs a year; while the other employees, the secretaries, clerks, etc., receive salaries ranging from 6,500 to 10,100 francs ($1,300 to $2,020) depending upon the length and nature of the service.[31]

Cantonal and Municipal Ownership and Regulation

In Switzerland all but an insignificant number of gas systems and of water works are municipally owned and operated. The occasional privately owned plant is subject to municipal (communal) concession and regulation.

Purely municipal tramways are in the main municipally owned and operated. The Basel tramway (street railway) system may be taken as typical of the majority of street railway systems in the most important Swiss municipalities. The outstanding feature of such ownership and operation is that the system is run inde-

[31] Information furnished by Donald R. Heath, American Consul, Berne, Switzerland.

pendently of the regular governmental or political departments and upon a purely business basis.[32]

In the field of electricity, cantons and communes through direct ownership or stock ownership in mixed ownership companies control all but an insignificant portion of the electricity generated. This is furnished usually in bulk to the distributing lines in the communes.[33]

The cantonal legislature in the first instance has jurisdiction over the more general problems of power development and distribution within the canton.

The development of power, rates, and the utilization of water power on both public and private water courses are placed under the authority of the canton.[34]

Right of expropriating lands and property necessary for power development under a cantonal concession is also under the authority of the canton.[35] Districts, cooperative societies, communes, private corporations and individuals interested in power development not only must comply with cantonal legislation, but must specifically apply for concessions to the administrative offices of the canton before entering upon a development project.

Concessions of water rights are granted by the competent authority (usually the administrative council—*Regierungsrat*—consisting of from 5 to 13 executives), of the canton where the proposed project lies.[36]

The cantonal authorities, in granting a concession, must give due consideration to public interests, rational utilization of the water course, and existing rights and interests.

Concessions may be granted only to Swiss citizens and Swiss corporations (private and municipal). The domicile of the concessionaire must be in Switzerland during the entire duration of the concession. A concessionaire company must have a legal place of business in Switzerland and two-thirds of the board of directors must be Swiss citizens with Swiss domicile.[37]

Concessions may not be transferred without permission of the conceding authority. But in case of refusal by cantonal authorities on any ground other than public interest the refusal may be set aside by the Federal Council.[38]

The concessionaire acquires, within the limits of the concession, the full right of developing and exploiting the water power, which right shall not be denied him except in case public use demands it and then only with adequate indemnity. The indemnity is to be determined by the Federal Tribunal.[39]

[32] Der Grosse Rat des Kantons Basel-Stadt, *Gesetz betreffend Organisation der Basler Strassenbahnen* (vom 2 April 1925). Sec. 1.
[33] See above pages 1–2.
[34] L'Assemblée fédérale de la confédération suisse, *Loi fédérale sur l'utilisation des forces hydrauliques* (Du 22 décembre 1916). Arts. 2, 17.
[35] *Ibid.* Art. 48.
[36] *Ibid.* Art. 38.
[37] *Ibid.* Arts. 38–40.
[38] *Ibid.* Art. 42.
[39] *Ibid.* Art. 43.

The maximum duration of a concession is limited to eighty years from the date when the plant begins operations. In case the concession has been granted to a commune (or public corporation) it may be renewed unless reasons of public interest are opposed.[40]

The law provides that every concession must contain the following prescriptions:

1. The identity of the concessionaire.
2. The extent or limits of the right to utilize power and the manner of utilization.
3. The tenure of the concession.
4. The obligations to be imposed upon the concessionaire, such as annual duty (*redevance*), furnishing of water or energy to the district, and other specific charges.
5. Concessions of more than 50 horsepower must contain prescriptions:
   (a) relative to the time limit for beginning work and for inaugurating the service.
   (b) relative to the right of the conceding authority to reclaim or repurchase the power project.[41]

In addition to the obligatory provisions the concession may contain the following:

1. Uses for which the power may be employed.
2. Statement of the capital to be expended for construction, and plans for construction and exploitation.
3. Extent to which the conceding authority may participate in the enterprise and share in the profits.
4. Regulations with regard to: the rate to be charged the purchaser of energy; conditions under which energy may be furnished gratuitously or at reduced rates; reduction of sales price proportionate to the financial yield; and the amount of energy to be supplied to the district around the project.
5. Participation of the concessionaire in the maintenance and alteration of the water courses.[42]

The conceding authority has the right to inspect the management and demand efficient administration on the part of the concessionaire in all cases where the conceding authority has retained in the concession the right of repurchase, participation in the profits and reduction of prices in proportion to the financial yield.[43]

Regulation of Cooperative Societies

Cooperative societies of users of electricity formed "to establish in common installation for the purpose of producing or augment-

[40] *Ibid.* Art. 58.
[41] *Ibid.* Art. 54.
[42] *Ibid.* Art. 55.
[43] *Ibid.* Art. 56.

ing hydraulic power" are subjected to the regulatory authority of the canton as follows:

1. The cantonal authority decides cases of dispute with regard to admission of members to the association, to participation of members in expenses and advantages, and to revision of the statutes or by-laws of the society.
2. Cantonal authority by decree may establish such cooperative society at the request of a majority of the interested parties (owners of majority of power) in a designated territorial district. It may also require applicants for concessions subsequent to the forming of the society to enter the society and pay an equitable contribution.
3. The by-laws (or statutes) of the society before going into effect must receive the approval of the cantonal authority, and if the society cannot agree as to content the by-laws are drawn up and promulgated by the cantonal authority. Every modification of the by-laws must also receive the same approval and the canton has the right, "in case equity necessitates it" to revise the by-laws.

The by-laws must govern the conditions of admission to the society, the organization of the society, participation of its members in the expenses and in the common advantages, the revision of the by-laws, and the dissolution of the society.[44]

Taxes and Duties Imposed Upon Electric Enterprises

The annual duty or excise tax (*redevance*) imposed by the canton cannot exceed 6 francs per theoretic horsepower (75 kilogrammeters per second). The theoretic horsepower is computed by a somewhat complicated formula including such elements as the height of the falls and quantity of water.[45]

In case the canton fixes the annual duty at the maximum (6 francs) the canton is denied the right to levy any special tax (impôt), but in case less than the 6 franc maximum is levied a special tax may be levied. The total of the two, however, must not exceed 6 francs.

The concession tax which is levied by the Confederation is divided between the interested canton and the Confederation. The concession tax, the annual duties, and other obligations shall not be higher or bear more heavily for energy transmitted to other cantons than for energy employed in the canton itself.[46]

Communal Administration and Operation

The administration of public utilities by the larger communes and city-cantons may be fairly portrayed by the experience of the municipality of Basel.[47]

[44] *Ibid.* Arts. 34–37.
[45] Le Conseil fédéral suisse, *Règlement concernant le calcul des redevances en matière de droits d'eau* (Du 12 février 1918). Arts. 1–23.
[46] Le Conseil fédéral suisse, *Loi fédérale sur l'utilisation des forces hydrauliques* (Du 22 décembre 1916). Art. 49.
[47] Der Grosse Rat des Kantons Basel-Stadt, *Gesetz betreffend das Gas-und Wasserwerk und das Elektrizitaswerk* (vom 8 Merz. 1900, mit den Abanderunger vom 16 Januar 1908 und das Beamtengesetzes vom 8 Juli 1909).

The gas and water works belong to the inhabitants of Basel, and are operated independently and distinct from other governmental activities. The construction and operation of the water works plant of the Canton of Basel is in charge of the City of Basel. The works are administered under the direction of the Sanitary Department. In the Sanitary Department are:

1. Gas and water commission.
2. The electricity commission.

The gas and water commission has charge of the administration, regulation of rates, and finances in general. Under each of these two commissions is a manager, one for gas and water, and a second for electrical works. With regard to technical matters an inspector is provided for each of the works: gas, water and electricity. Closely connected with the manager and inspectors is a treasurer who performs many duties in connection with the actual administration of the works. The Sanitary Department appoints the higher administrative officers in each enterprise, while the managers nominate the subordinate officers and hire the workmen. In the larger works the Sanitary Department at the recommendation of the manager selects outside personnel.

Personnel—In the Gas and Water Enterprises:

First—Administrative service.
1. Manager
2. Cashier
3. Secretary and Recorder
4. Superintendent of Stores.

Second—Technical Service.
1. Chief Engineer.
2. The necessary Assistant Engineers.
3. Technician.
4. Chief Draftsman.
5. The necessary technical assistants.
6. Assistant Draftsmen.[48]

The organization of the personnel in the Electricity Service is similar to the above, modified sufficiently, however, to take care of the the technical differences in the services.

Policy with Regard to Profit.—The gas and electrical departments are conducted for profit, while the water works are conducted neither to make profit nor to incur loss.

Administrative Details.—Each of the managers yearly submits a budget to the Sanitary Department, which includes estimated receipts, proposed expenditures both for maintenance and for capital purposes, together with the receipts and expenditures of the past year. The managers have charge not only of the operation of the plants, but the care of materials, and the sale of by-products. The managers also present to the department suggestions with regard to enlargement of the plants. The Sanitary Department can approve within the budget the enlargement of the plant or the

[48] *Ibid.* Sec. 5.

increase in services. The budget must receive the approval of the Cantonal Council. A special accounting system appropriate to industrial undertakings must be installed in each enterprise. A special accounting of the power plants must be kept. All outlay for maintenance must be charged to operation, and no outlay for enlargement is to be charged to the capital account unless increase in value results. The State may advance money to assist these enterprises, but adequate interest is charged. After consulting the Sanitary Department the Administrative Council fixes the rate of interest.[49]

Determination of Rates.—Standard rates for gas, water and electricity are fixed by the Administrative Council (*Regierungs-Rat*) and ratified by the *Grosse Rat*. A discount on the standard rates is allowed for state and municipal establishments, and for large private customers. This is fixed by the administrative council on the suggestion of the Sanitary Department. The surplus at the end of the year goes to the municipal treasury. In the water works department the surplus is applied to the reserve fund to be used for extensions. The Administrative Council makes decrees for the use of gas, water and electricity, and for the regulations concerning the same. The customers of the gas, water and electrical enterprises make the best of any interruptions if such are inevitable; that is, there is no claim for compensation. The management may refuse to furnish these services if it is against the public interest, or if the subscribers fail to abide by the regulations and if they fail to pay their bills after repeated notices.[50]

Interesting light is thrown upon the operation of the Electrical Works in Zurich by the following data from the annual report of 1928:

> "Owing to the favorable accounts of 1927 the rates for light and power, which had been greatly reduced on January 1, 1927, could be lowered still more. On the first of October, 1928, the rate for alternating current (*Wechselstrom*) for the whole year was fixed at 50 *Rp/k Wh.* (Reichs-pfennig kilowatt hours) in the high rate and 20 *Rp. k Wh.* in the low rate. The high (Hoch-tarif) now stands 16 per cent under the lowest pre-war rate. At the same time the rates for the alternating current were also reduced; they stand, on the average, on the level of the lowest pre-war prices. Since the purchasing power of the mark is 60 per cent less than in 1913 this reduction of price of electric energy may be considered noteworthy. In the case of a minimum consumption of energy amounting to 60 francs in the year the consumers are exempt from charges for the meter if they use electric stoves and hot water heaters uniformity the whole year through."[51]

Zurich derives power from the Brunder power works in Chur, which power works is owned and operated by a joint stock company of which Zurich is a share holder.

[49] *Ibid.* Sec. 40.
[50] *Ibid.* Sec. 20.
[51] Zürich, *Geschaftsbericht des Stadtaten von Zürich für des Jahr*, 1928, p. 297.

Street Railway Administration

The administration of the street railway system of Basel is supervised by a street railway commission of six members chosen by the administrative council (*Regierungsrat*).

It recommends to the city council and to the administrative council regulations for administering the system, advises with regard to policies relating to building and managing the system, preparation of budget, schedules, choice of operating officials, etc.

The direct management of the system is under a Director or Manager of Street Railways who is a permanent official with expert training. The management is entirely separated from the political administrative departments. It is organized upon a business basis with four main divisions:

1. Administrative (general).
2. Construction and maintenance.
3. Operation of road.
4. Store house and workshop.[52]

The policies and laws regarding salaries, wages, service regulations, retirements, etc., established by the Confederation for the national railways, apply to the officials and employees of the street railways.[53]

After receiving advice from the Director and Street Railway Commission, the Administrative Council fixes rates of fare and fare schedules.[54]

Motor Bus Regulations

By federal decrees a federal concession is required before motor bus service may be inaugurated: first, for regular passenger and baggage transportation[55] (indicated below as permanent service); and second, for carrying passengers on regular round trip sight-seeing tours or on sight-seeing tours where the passengers are not brought back to the point of departure[56] (indicated below as sight-seeing service).

Concession for permanent service are granted by the Postal Department after consultation with the Department of Railways, and with the interested cantonal and communal authorities.[57]

Concessions for sight-seeing services are granted by the Federal Department of Posts and Railways with the advice of the Director General of Posts.[58]

The tenure of the concessions for the permanent service is for ten years unless special circumstances justify a different tenure. At the end of the period the confederation may take over

[52] Der Grosse Rat des Kantons Basel-Stadt, *Gesetz betreffend Organisation der Basler Strassenbahnen* (vom 2 April 1925).
[53] *Ibid.* Sec. 11.
[54] *Ibid.* Sec. 17.
[55] Le Conseil fédéral suisse, *Ordonnance concernant les concessions d'entreprise de transport par automobiles* (Du 8 février 1916).
[56] Le Conseil fédéral suisse, *Arrêté réglant l'octroi de concessions pour des courses d'automobiles périodiques facultatives* (concession postale B.), (Du 19 mars 1929). Art. 1.
[57] Le Conseil fédéral suisse, *Ordonnance* (Du 8 février 1916). Art. 6.
[58] Le Conseil fédéral suisse, *Arrêté* (Du 19 mars 1929). Art. 3.

(repurchase) the enterprise upon payment of an equitable indemnity to be determined, (arbitrated) in case of disagreement, by a commission of experts one from each side and a presiding officer chosen by the two commissioners.[59]

The tenure of the concessions for sight-seeing tours is for the current civil year only and can be revoked at any time if the conditions in the concession are not observed.[59]

The application for permanent service must be accompanied by a statement giving:

1. Name, birthplace, and residence of the entrepreneur, or the firm name and address of the company.
2. The routes regularly to be covered.
3. Minimum number of services (trips) which the entrepreneur agrees to perform.
4. Price proposed per kilometer or by zone for transportation of persons or baggage.
5. Number, capacity and construction of automobiles to be employed.
6. Financial statement showing that the petitioner has the financial capacity to conduct the proposed service.[60]

A statement essentially the same is required from petitioners for sight-seeing concessions.[61]

After a concession has been granted the regulatory supervision of the service is accorded to the Postal Department as the latter operates a great number of postal, passenger, and sight seeing services throughout Switzerland.[62]

Among the more important regulative functions exercised by the Postal Department and its agents are:

1. Approve renewals, suspensions, or transfers of concessions to a third party.
2. Approve rate schedules.
3. Receive reports on, and investigate accidents to persons and property.
4. Inspect and approve safety devices, equipment, seating capacity, etc.
5. Receive and keep on file annual financial reports of the concessionaire in form and content specified by the Postal Department or their agents.
6. Discharge incompetent drivers.
7. Determine maximum legal speed.
8. Determine maximum load to be permitted.[63]

The Postal Department reserves for its own motorbus carriers all sealed letters, postcards and other sealed matter amounting to a

[59] Le Conseil fédéral suisse, *Ordonnance* (Du 8 février 1916). Art. 6.
[60] Le Conseil fédéral suisse, *Ordonnance* (Du 8 février 1916). Art. 7.
[61] Le Conseil fédéral suisse, *Arrêté* (Du 19 mars 1929). Art. 2.
[62] Le Conseil fédéral suisse, *Ordonnance* (Du 8 février 1916). Art. 25. Also information from fédéral suisse département des postes et des chemin de fer.
[63] Le Conseil fédéral suisse, *Ordonnance* (Du 18 février 1916) Arts. 12, 28, 31, 46, 48.

weight of 5kg.[64] However, the Postal Administration at its option may require the concessionaires to carry postal letters, messages and valuables, and provide in their vehicles places of safety for such postal materials, and may require the collection and delivery of mail along the route.[65] Official correspondence must be carried free but just compensation is paid by the Postal Department for all other mail service. If the concessionaire and Department can not agree upon the terms of the compensation, the Federal Council decides.[66]

Other important federal regulations imposed upon the concessionaires are:

1. The concessionaires must insure in a Swiss company against accidents to employees and passengers.
2. A fund for the relief of sickness among employees must be set up, or insurance against sickness be taken out with a Swiss company.
3. All equipment must be Swiss made unless otherwise authorized by the Postal Department.
4. Employees must be of Swiss nationality not less than 18 years of age (22 years in case of sight seeing drivers), and must have passed prescribed examination.[67]

The fees imposed by the federal government for granting of concessions in the case of permanent service are as follows:

1. For the original grant of the concession, 250 francs plus 25 francs per kilometer of authorized route.
2. For the transferring of a concession to a third party, 250 francs.
3. For the modification of the concession, 100 francs.
4. For extending the date fixed for beginning operations, 100 francs.

It should be noted here that the revenue from the fees are divided according to a federal law between the Postal Department and the cantons served by the concessionaires.[68]

Fees for concessions for sight-seeing service are as follows:

For round trip sight-seeing service per weekly trip an annual fee of 25 francs, if the journey is not more than 125 kilometers; 50 francs if the journey is between 125 and 250 kilometers, and 25 francs for each additional 250 kilometers or fraction thereof. In case more than one weekly trip is made the fee is multiplied by the number of trips. A fee twice the amount of the above is charged when the tours are not round trip.[69]

In case of the last mentioned type of tourist service (passengers entering and leaving bus at various points on route) and in case the service is in competition with the regular postal service busses

[64] *Ibid.* Arts. 17–18.
[65] *Ibid.* Art. 20.
[66] *Ibid.* Arts. 30–44.
[67] *Ibid.* Art. 9.
[68] Le Conseil fédéral suisse, *Arrêté* (Du 19 mars 1929). Art. 8.

a supplementary tax of two centimes per traveler per kilometer is charged. The supplementary tax must be paid in advance, based upon the trips planned and the seats available. In case of over payment a refund to the concessionaire is paid by the government the following year.[70]

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[70] *Ibid.* Art. 9, Sec. 2; Art. 10.

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